# Money of Pre-Federal America

EDITED BY

*John M. Kleeberg*

*Coinage of the Americas Conference*
*at The American Numismatic Society, New York*

May 4, 1991

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# Preface

The money of pre-federal America provided the subject for the seventh annual Coinage of the Americas Conference sponsored by the American Numismatic Society. Since its inception, this program has enjoyed the enthusiastic support of the Society's governing Council as a forum for the dissemination of emerging research in the coinage and currency of North and South America.

The purpose of these conferences is to facilitate the exchange of information. Toward this end, experts in the field are invited to present papers, collectors are invited to exhibit, and notice of the conference is circulated widely to encourage attendance by all interested in the topic. The Society also mounts an exhibition from its holdings and invites registrants to come to know the Society's collections and library better during the days of the conference.

Registrants at the Coinage of the Americas Conference had a particular reason to attend. At the initiative of ANS Councillor Joseph R. Lasser, a special exhibit of outstanding examples of Massachusetts silver was organized by Anthony Terranova with the assistance of ANS Associate Curator of Modern Coins John M. Kleeberg and ANS Registrar Johanna Bergmann. This exhibit (an assemblage of what Lasser termed the "caviar of Massachusetts silver") showed selections from the collections of Andrew Hain, Alan V. Weinberg, Anthony Terranova, Larry Stack, Joseph Lasser, and Eric Newman, plus examples from the collection of the ANS. A catalogue of this exhibit is Appendix 1.

ANS Curator of Medals Alan M. Stahl has devoted much time to the study and cataloguing of the ANS collection of Indian peace medals, partly in connection with a paper he delivered at the conference of the Fédération Internationale de la Médaille in Helsinki, partly while working on an exhibit for the centennial convention of the American Numismatic Association, and partly in connection with this conference. A catalogue of the ANS collection of Indian peace medals is among the fruits of his work and is Appendix 2.

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The Society is grateful to the following contributors who helped make the 1991 Coinage of the Americas Conference possible:

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Amos Press and *Coin World*

Illustration of the ANS collection of early Indian Peace Medals was made possible by a contribution from John W. Adams.

# Introduction

Until the Civil War, the United States was largely an agricultural country. This had two important consequences: first, the chief investment outlet was land speculation. This meant high indebtedness, meager cash flow, and frequent financial catastrophes. Secondly, the harvest always put unusual strains on the financial system, often leading to collapse: this is why stock market crashes occur in October.

These strains, present throughout the nineteenth century, were even more intense in colonial North America, which produced no precious metals of its own. British North America needed specie. But in the British imperial system, America, in close proximity to the mines of Mexico and Peru, had to serve as a source for silver—not a destination. The destination for silver was the China trade and Britain's growing empire in India, particularly after Robert Clive's conquest of Bengal in 1765 and in response to imperial crises such as Haidar Ali's invasion of the Carnatic in the 1770s. In India silver was so short that the multi-talented Warren Hastings sought to remedy the problem by minting gold mohurs. An answer to the specie shortage in British North America would not be forthcoming from London—neither from Whitehall nor from Plantations House. America must look to herself. And so she did; at first tentatively, in the end violently. The coins and paper money reflect this. The looser reins of the Commonwealth allowed the first steps: the Massachusetts silver is astonishing for its variety, its abundance, and its sophistication. Richard G. Doty shows that the Boston mint was using machinery at a time when the Tower Mint was still striking coins by hand. The New Yorke in America token, I argue, is

another remnant of this looser period; a period when central control of minting collapsed in England as well, as evidenced by the vast token issues of the mid-seventeenth century. Under Queen Anne, the reins were drawn tighter. But if coins were still a regal prerogative, paper was not. Eric P. Newman shows how native American ingenuity, abundantly evidenced for Massachusetts silver, was applied to paper money as well—both its licit and illicit production. Paper money is important evidence of another kind: for the backgrounds of men of property. Joseph R. Lasser examines this aspect, which is part of an extremely important larger question: was the American Revolution really a social revolution? Charles Beard argued many years ago that it was not; Lasser uses the evidence of paper money to argue that it was.

The revolution was successful; but the new nation had many struggles before it. The Articles of Confederation soon proved inadequate. Under Britain, Massachusetts was not permitted to coin its own money; under the Articles of Confederation, it could. And so could New Jersey, Vermont and Connecticut; and so, as it proved, could raffish types like Jarvis, William Duer and Thomas Machin. Dr. Philip L. Mossman unravels some of the mysteries of the Connecticut coinage, probably the most complex of the state copper series. New York never authorized an official state coinage, but produced many of the most fascinating issues in the series. Michael Hodder argues for the authenticity of one highly controversial New York issue, the Lima style doubloons of Ephraim Brasher. Finally, the adoption of the Constitution and the establishment of the Mint did not mean that the struggle was over. Medals are usually a luxury item, but Indian Peace Medals were not a luxury item, they were a necessity of policy. Alan M. Stahl's account of the Indian Peace Medal is the first to examine the very important French medals as well as the English medals since 1918. The history of the Indian peace medals parallels that of the copper halfpenny/cent: first English imports, then American strikings on English planchets, then a crude medal of wholly American manufacture, and finally skillful American strikings on American planchets. The Mint needed to import its planchets to strike Indian peace medals, just as it had to import planchets from Matthew Boulton or overstrike Talbot, Allum and Lee tokens to produce early cents and half cents.

Whitehall starved the North American plantations of specie because of a fundamental economic error: it believed that the wealth of a nation consisted in its holdings of silver and gold. Only at the very end of the colonial period would a great philosopher show that it came from the productive employment of land, labor, and

capital. The philosopher was Adam Smith; his book was the *Wealth of Nations*; the year was 1776.

John M. Kleeberg
*Conference Chairman*

# Making Money in Early Massachusetts

*Richard G. Doty*

**Coinage of the Americas Conference at the American Numismatic Society, New York**

**May 4, 1991**

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Massachusetts silver, centering on the Pine Tree shilling, is among the most famous and best-loved of early American coinage. I suspect that this is partially due to the fact that the creation and circulation of this series suggests to us that our remote predecessors had some of the virtues which we still consider a peculiar monopoly of Americans: self-reliance, cleverness, ingenuity, the ability to dissemble (as with the frozen date, 1652, used on virtually all of the coins) in a good cause—in sum, the gift of making the best of a bad situation, of actually prospering from it.

But there is also a good deal of solid historical importance about these coins. They were our first attempts at moneying, struck only one step removed from our arrival upon these shores. There is simply nothing like them in any other colonial area of that time, and there are very few remotely comparable examples in subsequent times. So in and of themselves, and because of what they tell us about ourselves when very young, these crude silver coins are important.

But they are also imperfectly understood in a number of important ways. We don't know how many were struck. We don't know when production of one type ended, when that of another began—or even, as Michael Hodder recently observed to me, whether members of various series were elaborated in a simple sequence or simultaneously.[1] We don't know the precise origins of the very silver used to coin them.

Finally, we don't know how they were struck. It is this last area which intrigues me and which forms the topic of this paper.

My interest in the methodology of coinage for the Massachusetts series was aroused when I saw a comment by Michael Hodder, appended to Lot 5505 of the Bowers and Merena sale of the Chris Schenkel Collection, held in New York on November 12-14, 1990. This lot consisted of a Pine Tree shilling, Noe 8, with two heavy planchet bends. Hodder observed that such bends had been traditionally ascribed to early attempts to ward off witches. He disputed this explanation, suggesting instead that the curious "S" bends might have resulted from the employment of a Taschenwerke or rocker press to strike the coin.[2] While I would dispute his evidence as presented by this coin, for reasons to be mentioned later, I believe that he is correct in his major assumption, and that something very much like a rocker press was employed to strike a major portion of the Massachusetts issues.

Before going into what I see as evidence for the mechanized production of early Massachusetts silver, let me quickly examine the phenomenon of the "witch piece." Hodder observes that "there is no contemporary evidence for this practice," that is, of bending

coins to ward off malign paranormal influences.[3] I must concur: the earliest reference to the practice I have found is contained in Sydney P. Noe's monograph on the Pine Tree coinage, published in 1952. Noe explains:

> We are told that it was the superstitious belief of the time that wearing a bent coin afforded protection against the power of "witches." Some of our Pine Tree coins show evidence of having once been bent even though as we see them now they have again been flattened. Some show dents which imply that teeth must have been the means of bending them initially. The thinness of the Pine Tree coins made bending an easy operation, and some with holes for suspension may have seen service in the same manner as those which were bent.

Noe suggests that this bending of Massachusetts silver coincided with the witchcraft hysteria of the early 1690s, but he cites no contemporary sources for this, or for connecting the practice of bending coins with the hope of warding off witches.[4] He illustrates several bent Pine Tree shillings (including one of the thicker second type, interestingly enough) on plate 6 of his monograph. It is important to observe that the positions of the bends vary from coin to coin.

As indicated earlier, it is my opinion that a portion of the Massachusetts silver coinage was created by means of a rocker press or something very similar. I would include all of the Oak Tree coinage in this group, as well as all of the large, and presumably earlier, members of the Pine Tree shilling series, and, probably, all of the subsidiary Pine Tree issues. It is my belief that later Pine Tree shillings were struck on a screw press, for reasons which I shall discuss at the end of this paper.

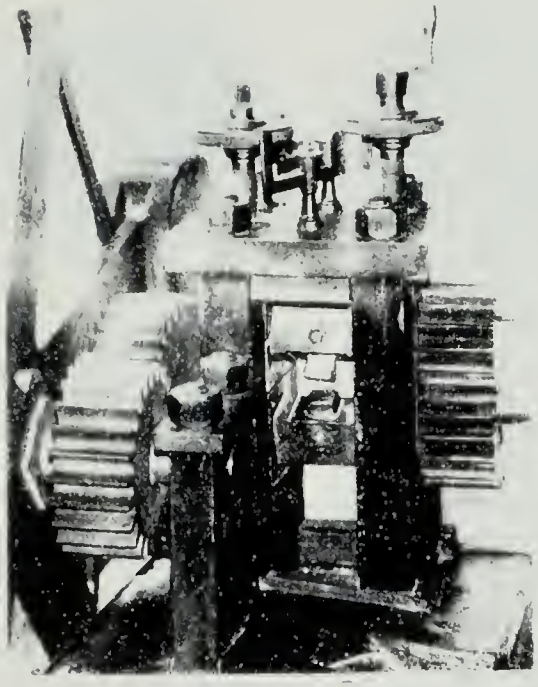
## The Rocker Press

The rocker press, and several related machines such as sway and lever presses, were early alternatives to the screw press, and variants on a better-known mechanism, the roller press. All of the mechanical contraptions of the early modern period attempted to perform the same labor: to impress designs into the upper and lower faces of a coin more accurately than possible with the traditional hammering method. But they impressed their designs at different stages in the moneying process. The screw press represented the final step in the methodology of which it was the center: round, flat pieces of metal, called planchets, were created first, and then struck in the machine, emerging as finished coins. But for the roller press and

its relatives, striking tended to occur as an intermediate step: a strip of metal of the proper thickness would be passed between the upper and lower dies, embossed, and only later cut into individual coins. Denis R. Cooper devotes an entire chapter of his recent book to this second type of coining technology ("Development of Rolling Mills for Coining, 1530-1730 AD").[5] He notes that it was developed in Germany in the sixteenth century, dividing rather quickly into methods utilizing designs engraved on rollers ("Walzenwerke" coining) and those engraved on inserts, which were fitted into axles where the rollers would have been. This second method was known as "Taschenwerke," and I believe it was the basis for the Oak and a portion of the Pine Tree coinage.

In either case, the key to the technique was to keep the upper and lower rolls or inserts in perfect alignment with each other. This was to prove a perpetual difficulty, even though elaborate gearwork was eventually created for this purpose, as illustrated (fig. 1). But the method had a certain amount to recommend it to early coiners. With the roller press, it became possible to make extremely large coins, as anyone who has ever seen a Spanish cincuentín, or 50 real piece, will surely agree. And the rocker press and its variants had one signal advantage for earlier moneyers, one which Cooper overlooked in his description of early coining practices: it obviated the necessity of creating large male and female screws, one of the most difficult of all metalworking operations in a preindustrial setting. All one would need for coining with a rocker press was a wooden frame sturdy enough for the purpose, cast-iron gears to keep the upper and lower dies in proper relation to each other, and the dies themselves. Those dies would have to have curved faces, however: the action of this type of coining press is a rolling, cycloidal one, and it would be impossible to perform it with normal, flat-surfaced dies (fig. 2). And the images on those dies must be somewhat oval, again to compensate for the rolling motion of the press. As Cooper explains:

> As the edges of the blanks were inserted between the rolls only a small area met the engravings, but as the rolls turned, the area of the blank to be embossed increased until it was at its maximum at the diameter; from this point the area decreased until the embossing was completed at the opposite edge of the blank. The greatest force, therefore, was needed at the diameter, but the greatest compression came at the shortest length of embossing on the edges which were furthest from the diameter. This resulted in oval coins. To counteract this ovality the



1. Taschenwerk mill (from Cooper, *The Art and Craft of Coinmaking*, p. 63.

2. "Sway" press (from Cooper, *The Art and Craft of Coinmaking*, p. 73

> Taschenwerke dies were made with a modified curved surface and the engravings were oval to allow for the blank stretching during the rolling. Coins made in this way are characterised by the edges which have a rolled-over appearance, and uncirculated coins often reflect the light in bands. The in-going and out-going edges are usually thinner and the coins correspondingly elongated.[6]

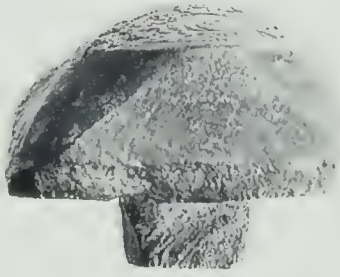
The anomalies described above may be familiar to students of the Oak and Pine Tree series. They will also be familiar to students of early German and Austrian coinage. Two coins, a quarter and a half thaler from Salzburg, both from the closing years of the seventeenth century, display most of the characteristics Cooper described, particularly the warping effect which so often appears on coinage struck on roller and rocker presses. A slightly earlier one-sixth thaler from Salzburg displays similar characteristics, but its warp is a *double* one (fig. 3). Several Oak and Pine Tree pieces display similar characteristics.

The American Numismatic Society is very fortunate in having a die for a rocker press, created for minor coinage in Anhalt, Germany, in the 1620s. Its upper surface is curved, with the curve

3. Salzburg: a) half thaler, 1694; b) quarter thaler, 1686; c) sixth thaler, 1627.

gradual at one end and fairly pronounced at the other (fig. 4). I hazard the opinion that the die would have been elaborated in this way in order to provide a certain acceleration within the movement of the coining process. Cooper pictures two other Taschenwerke dies, intended for a klippe issue from Nuremberg, Germany.

In passing, the curved upper surface of a typical Taschenwerke die might go far toward explaining why Massachusetts coinage dies were patiently reground, reworked again and again: those dies would have been very difficult to make from scratch, inspiring recycling whenever feasible.



4. Anhalt, rocker press die.

All of this noted, what evidence is there for the use of such a press in seventeenth-century Massachusetts? There are two bodies of potential testimony. Neither is conclusive, and one of them may have nothing whatsoever to do with the Oak and Pine Tree coins. But they are all that we have, and together, I think, they may point us towards some rather interesting conclusions.

The first bit of possible corroboration comes from an entry in the will of John Coney, a prominent Boston silversmith who died in 1722. Among Coney's personal effects at death there was listed "An engine for Coining with all utensils belonging thereto £.10-10-0." Coney may have been apprenticed to John Hull, who was one of the principals in the Boston mint. Certainly the two men knew each other, Coney acting as pallbearer for one of Hull's relatives, another silversmith named Daniel Quincy, in 1690.[7] This is a very weak peg upon which to hang an argument, but one part of it strikes me as significant. That is the value assigned to the "engine for Coining," ten pounds. I assume that Coney's will was speaking in terms of local currency: if so, it must be observed that ten pounds was not a very large sum of money in 1722, and that it would not have been an accurate valuation for a screw press, even an old one. I base this on a later transaction between Matthew Boulton and Thomas Williams, by which the former purchased used screw presses from the latter at £.105 each, Sterling. The presses had been used to strike Parys Mines halfpennies, slightly larger than Pine Tree shillings.[8] Even allowing for the 70-year gap between the Massachusetts will and the Midlands sale, ten pounds in an inflated local currency would have been an inaccurate valuation for a screw-type coining press. But it might not have been an excessively high one for a smaller machine of the rocker type, one which, by now, might not have been self-evident as to use.

Still, this scarcely proves that the coining engine of the will was a rocker press, let alone that it had been John Hull's press, used to strike Oak and Pine Tree coinage. We shall get farther if we go into the other available evidence, the testimony offered by the coins themselves.

## The Evidence of the Coins

First of all, many of the surviving coins display a warped appearance, somewhat similar to that seen on the Austrian coins mentioned earlier. A Noe 5 Pine Tree shilling shows the typical planchet deformation or warp frequently visible on well-preserved Oak and early Pine Tree coins. The warp is double, S-shaped, and runs at right angles to the top and bottom of the coin. When a produc-

5. Pine Tree shilling, Noe 5.

6. Oak Tree sixpence, Noe 21.

tion warp is present on these pieces, this is how it will look (fig. 5).

Secondly, the die axis on this coinage is very consistent, generally at a twelve o'clock relationship with very little internal variation. This fact does not prove that a rocker-type press was used to strike the coinage, but it does suggest that some form of mechanization was in force at the Boston mint.

Thirdly, the inner beaded borders surrounding the tree or the denomination on these coins is frequently oval rather than perfectly round. This is seen early in the coinage, as with Noe 1 and 2 in the Oak Tree series, but it appears among Pine Tree coins as well—but only among Type I (broad and thin, presumably earlier) members of that group.

Fourthly, when coins are struck off-center, only one side will ordinarily be misstruck, and it will usually be misaligned either to the north or south, but not to the east or west. An ANS Noe 21 Oak Tree sixpence displays this oddity, which is by no means conclusive but which does fit in with how a rocker press might have operated, with one die out of alignment from the other (fig. 6).

Fifthly, several varieties of Oak and early Pine Tree coins show metallic striations tending in a distinctly parallel, vertical fashion, which is what one might expect in a press featuring a rolling type of motion. A Noe 6 Oak Tree shilling displays this movement of metal, along with an interesting reverse die break, also explainable in conjunction with a rolling rather than an up-down relationship of coining dies (fig. 7).

These are all possible pointers toward a coining methodology. But there are members of the two series which offer much broader hints as to how they were made. For example, many Oak and Pine Tree shillings show a peculiar smashing or broadening of denticles or other design elements at twelve o'clock, nearly always on the obverse side. A Noe 2 Pine Tree shilling displays this feature in a typical fashion (fig. 8). Two Noe 1 Pine Tree coins at the ANS show differing degrees of metal deformation, indicating that it was indeed

7. Oak Tree shilling, Noe 6.

8. Pine Tree shilling, Noe 2.

taking place during the coining process and was not the product of a defective die. This spread or smashed effect suggests to me a deformation of metal at one point on the coin but not at others, at some time during the striking process, most probably at its end.

Does this peculiarity find expression on other people's coinage, pieces we know were created on rocker or roller presses? Yes, it does: two Austrian 15-kreuzer coins of the 1660s, one from Vienna and the other from Neuburg-am-Inn, manifest a very similar sort of deformation, at nine and three o'clock respectively (fig. 9). This suggests a similar machine, with dies affixed in a position ninety degrees away from the Massachusetts norm. But the warping on these coins is also ninety degrees away from our norm: we are, I think, justified in speculating that whatever was seeing use by a mintmaster in Boston in 1662 would not have occasioned excessive surprise among his Austrian contemporaries.

9. a) Vienna, 15 kreuzer, 1662; b) Neuberg am Inn, 15 kreuzer, 1664.

With the examination of three more coins, we can move still closer to an informed guess as to how early Massachusetts money was created. Our first witness is a piece already described by Noe, his third variety of Oak Tree shilling (fig. 10). Noe recorded the impressions of what he determined to be either a square or octangular die, one in the shape "of a prism rather than a cylinder." From this, he concluded that the flattened sides of Oak Tree dies made it possible to mount them securely in place and strike coins without the rotation which had plagued members of the Willow Tree series—with or without the addition of a screw press to the equation.[9] Noe's reference to prismatic dies is a trifle difficult to visualize, and he was, I think, on somewhat dubious ground concerning the Willow Tree coinage. But he had unquestionably discovered the traces of a die on this coin. And it was probably the traces of a lower die. That is, in Massachusetts Oak and early Pine Tree coinage, the tree, or obverse, die was probably positioned on the bottom, and the die with the date and value, the reverse die, was probably positioned on the top.

Noe's coin suggests as much. But so does a member of the Pine Tree series, a Noe 1 with an incuse IIX below the tree. Many specimens of this die variety display the odd marking, which came about as the result of a clash between the two dies, an accidental striking when there was nothing there to be struck. The IIX, of course, was the IIX of the reverse die, which created a raised XII on the obverse die (just as it would have on an ordinary coin), and another incuse IIX on any coinage subsequently struck with that damaged die. A clash does not necessarily indicate which die was upper and which lower, but common sense suggests that it would

10. Oak Tree shilling, Noe 3.

11. Pine Tree shilling, Noe 1.

be far easier to create a die clash on the bottom die than on the top one. Such a clash also suggests the existence of dies in some fixed relationship with each other, as in a coining press. And the fact that the IIX is not directly opposite the place where we would expect it suggests a press whose parts could have shifted out of alignment rather easily. It suggests a rocker-type press, not a screw press (fig. 11).

With one final coin, we approach as near as we are likely to an unravelling of the mysteries of early Massachusetts moneying. This is a poorly-struck Noe 5 Oak Tree shilling. The coin has an up-curling lip of metal at 12:00 on the obverse. On that side, flow lines may be faintly seen below the letters H and V of MASATHVSETS. On the reverse, metal flow lines appear *above* the G and L of ENGLAND. It seems to me that what we have here is a coin struck in a press whose dies were oriented parallel to the direction of the rolling movement of the strike—which of course would also explain the direction taken by the distinctive warp seen on this coin and on so many of the others we have been examining. If I am correct about the top/bottom, reverse/obverse die arrangement on Massachusetts silver of this period, what this coin indicates is a positioning of those dies so that their tops were located at the very end of the rolling process; those tops would have been the last element of the coin to be struck, and, in this particular case, a misalignment of upper to lower die resulted in the unstruck metal at the top of the obverse being bent downward as the coin was created (fig. 12).

Based primarily on the evidence of the coins themselves, I conclude that the Oak and early Pine Tree issues of colonial Massachusetts were struck on something resembling a rocker press. I conclude that it must have looked very much like the drawing

12. Oak Tree, Noe 5.

reproduced by Denis Cooper of a "sway" or "lever" press, essentially a primitive version of the rocker press. Cooper observes that such a machine existed as early as the sixteenth century. He also opines that the small size of a surviving press of this type, from which his drawing was created, would have rendered it impractical for striking anything broader than around 20 millimeters, although I see no reason why a larger press could not have been constructed along similar principles.[10] Cooper advises that a sway press would have been less than fully successful:

> The construction is such that it would have been relatively difficult to get the opposing impressions opposite one another on the blank or strip. The interlocking lugs could not have engaged accurately in their recesses and they would have allowed unacceptable movement between the dies[11]

—which would go far toward explaining some of the striking anomalies among the silver coins of Massachusetts-Bay.

In time, the rocker-type press must have fallen out of favor with the Boston coiners. For the Pine Tree shilling, it was replaced by a new contrivance, whose actions at least were those of a screw press. There is no surviving written testimony about this change, but there is the evidence of the coins. They become smaller and thicker. As with Noe varieties 19 and 20, this new generation of coins begins to develop the types of die breaks we associate with "normal," screw press-struck money of the period.

The downward squeezing action of a screw press may have left traces on an ANS Noe 29, whose reverse displays a peculiar radiating effect in the denticles between seven and twelve o'clock. And specimens of Noe 26 and 28 from the same museum show evidence of double-striking of a type difficult to explain except through the intervention of a screw press. These two double-struck coins are perhaps our clearest indicators as to what was happening (fig. 13).

But we are primarily interested in the earlier, rocker-type press. And a major question remains to be answered: where did the Boston coiners get the idea?

I wish I could supply the answer. I had originally assumed that they might have gotten it from the contemporaneous British token coinage of pence and halfpence, which reached its height just as the Oak Tree coinage was getting under way. I had originally assumed that that coinage, consisting of diminutive pieces in copper and brass, would have been struck on traveling rocker or sway presses, affording a possible direct inspiration to the colonists. But an admittedly cursory examination of several hundred examples in the

13. Pine Tree shilling: a) Noe 29; b) Noe 26; c) Noe 28.

ANS of seventeenth-century tokens from the Norweb Collection proved inconclusive. I encountered no tokens with the telltale signs for which I was looking, and, while a much more extended search by John Kleeberg did turn up a few specimens with something like the warping we have been discussing, the majority of this collection does not exhibit such a characteristic. Moreover, while many of these tradesmen's tokens showed edge clips, all of the clips I saw appeared to have occurred before striking and not after—which is the precise opposite of what we might have expected, were rocker presses in common use.

So I fear that we must look elsewhere for the inspiration of the Massachusetts coiners. They may have gotten the idea from the lever presses used for affixing seals to colonial documents. Or it may have simply been in the public domain by that time, one of those concepts of which any middling mechanic would have been aware. We cannot know.

But we can, at last, clear up one misapprehension, confusion over witch pieces versus ordinary, rocker-struck coins. Coins reworked as amulets or talismans will have two roughly parallel bends, but they will almost certainly not function at a ninety-degree angle from the top or bottom of the coin. Pieces struck with the rocker-type press, if manifesting a bending acquired during the coining process, will always display it as two strictly parallel warps in a perpendicular relationship to the top or bottom of the coin. A warp acquired outside the mint will, in addition, be very bold, as evidenced by Lot 5505, the piece which led me into this investigation. But a warp acquired as part of the normal moneying process will be subtler,

even though distinctive. However acquired, each type of warping is evidence of a sort, shedding precious light upon the earliest generations of English settlers in Massachusetts-Bay.

[1] Letter of Michael Hodder to the author, October 12, 1990.

[2] Comments of Michael Hodder about Lot 5505, Bowers and Merena auction of the Chris Schenkel Collection, November 12-14, 1990, p. 411.

[3] See above, n. 2.

[4] S. P. Noe, *The Pine Tree Coinage of Massachusetts*, ANSNNM 125 (New York, 1952), p. 19.

[5] D. R. Cooper, *The Art and Craft of Coinmaking: A History of Minting Technology* (London, 1988), pp. 61-71. Illustrations of rocker and sway presses are also taken from this excellent publication.

[6] Cooper (above, n. 5), p. 64.

[7] H. F. Clarke, *John Coney, Silversmith, 1655-1722* (Boston, 1932), pp. 6-7. Noe also includes this bit of information in *The New England and Willow Tree Coinages of Massachusetts*, ANSNNM 102 (New York, 1943), pp. 24-25.

[8] Birmingham Reference Library, Matthew Boulton Papers, Assay Office 30, Mint Book Journal Mint, 1791-1798, p. 32 (entries of March 1, 1792).

[9] S. P. Noe, *The Oak Tree Coinage of Massachusetts*, ANSNNM 110 (New York, 1947), pp. 6-7.

[10] Cooper (above, n. 5), p. 73.

[11] Cooper (above, n. 5), p. 74.

# The New Yorke in America Token

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Although the coinages of other colonies, such as Massachusetts and Virginia, are more abundant, New York can certainly claim to have produced some of the most enigmatic pieces in the pre-federal series.[1] The outstanding example is the Brasher doubloon; but more mysterious than even the doubloon is the New Yorke token.

The New Yorke token first came to the attention of a wider public in October 1861, when Fisk Parsons Brewer, then a tutor at Yale, published an article about it in the *Historical Magazine*. The manuscript for Brewer's article, dated May 1861, is now in the possession of John Adams, who has published it in *CNL*.[2]

New Haven at this time was a hotbed of numismatic research—sometimes of numismatic frauds (the Fugio New Haven restrikes). In 1860 the Yale coin cabinet was arranged by Brewer, and a catalogue of that cabinet was published with the preface dated July 29, 1863. The New Haven Numismatic Society was established in 1862. Another numismatic luminary of New Haven was Charles Wyllys Betts, of whom more below.

The presence of that notorious creator of imaginary coins, Charles Wyllys Betts, in the same city at the same time as the New Yorke in America token was discovered must give us pause, but although Betts was inspired by the token to create fabrications, he did not fabricate it himself. The pedigree of at least one piece gainsays this. This is the piece in Leiden which was donated to the cabinet in 1851, when Betts was six years old. The Bache-Hall-Norweb-Smithsonian lead example has an even earlier pedigree, back to 1834, if we can trust the entry in Dr. Thomas Hall's ledger.[3] Furthermore, Brewer himself—a classics scholar and one of the earliest professors at Grinnell—appears to have been beyond reproach.

Fisk Parsons Brewer was born on October 19, 1832 at Smyrna (Izmir) in Asia Minor, where his father was a missionary. His uncle was Cyrus W. Field, who laid the Atlantic cable. He was graduated from Yale with the class of 1858. In January 1859, his father Josiah offered Fisk's services to the American Numismatic Society to purchase Greek coins, because Fisk was then in Athens, Greece for his health.[4] It was presumably on this European tour that Brewer visited the coin cabinet in the Hague. In 1860, Brewer arranged and catalogued the Yale coin cabinet. The various catalogues of the Yale cabinet show that Brewer and Betts were large donors—in Brewer's case, chiefly of ancient coins. There followed a number of years when he was at a loss for employment—evidently his health was too poor to allow him to fight in the Civil War. Finally, in July 1869, he was elected Professor of Greek at the University of North Carolina at Chapel Hill, and remained there until October 1873, serving also

as Librarian. From July 1871 to October 1873 he went to Athens, Greece, where he acted as United States Consul at the Piraeus. In October 1873 he was chosen Professor of Ancient Languages in the University of South Carolina at Columbia, but lost his position when Reconstruction ended in 1877 because he was a Northerner. In that year he also published an article in *AJN*, "The Coins and Currency of Modern Greece." In July 1877 he was appointed Professor of Greek at Iowa College in Grinnell, Iowa, but lung disease compelled him to resign in the summer of 1883. The next years were ones of suffering, until he died on January 26, 1890, aged 57.[5]

Brewer knew of only one example, in lead, which was in the Royal Cabinet in the Hague, of which he obtained an electrotype for the Yale College numismatic collection.[6] This coin is still in the Royal Dutch collection, although in 1986 it moved with the rest of that collection to Leiden (fig. 1). All electrotypes I have seen of the New Yorke token—and the ANS collection has six—either have come

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from the Hague example, or more likely, they are electrotypes of the Yale electrotype; they all have a large cud over the "I" in IN. This cud is clearly visible in the excellent drawing published in the *Historical Magazine*. The original Yale electrotype, unfortunately, is no longer there; presumably it was taken during the Brasher doubloon theft. But the electrotypes turned up on the market very early: the earliest auction I have found is that of the cabinet of Joseph N. T. Levick (an early researcher in United States tokens and large cents, and the originator of the idea for the *AJN*), sold on April 27, 1865, lot 26, where it was auctioned under the heading, "Fictitious Pieces, Struck Copies, and Electrotypes." It was described as "curious, lead, good" and realized 75 cents. Another early auction, that scheduled for December 14, 1874, but postponed to December 21, was catalogued by William Harvey Strobridge; lot 657 had electrotypes in "type metal and copper" which were sold to Edward Cogan for 10 cents. Among the Society's six electrotypes, two have a very early pedigree: these were the gift in February 1877 of no other than Joseph N. T. Levick, ANS numbers 1877.4.1-2 (fig. 2). This suggests that it was Levick himself who had the electrotypes made.

In 1865, another lead example turned up in the collection of Robert E. Bache. Robert Bache had died in England in 1834, and his collection of coins was then sent home to New York City; the coins then reposed in the vaults of the Atlantic Bank in Brooklyn, New York, until bought by William Eliot Woodward in 1864, and were sold at auction in 1865.[7] William Harvey Strobridge later wrote, "The writer well remembers the piece as he saw it in a drawer with the Virginia shilling, naked bust Washington, and kindred rarities in Mr. Bache's cabinet."[8] Although both these other items are indeed rare, they are fortunately genuine coins; we know them as Hancock's Roman Head Washington[9] and the Virginia silver pattern halfpenny.[10] I say fortunately, because guilt by association is a reason to condemn a coin, as when Matthew Stickney swapped the Immune Columbia in gold for the 1804 dollar.[11] The first brass example was found in a lot of Nuremberg and French jetons imported from the Continent of Europe by William P. Brown of New York, was auctioned by Woodward in 1874, and was acquired by Parmelee. Four were known to Crosby, three in lead (the Hague, Bache-Hall, and Appleton specimens), one (the Parmelee specimen) in brass. Since the lead ones were discovered before the brass ones, the latter was at first considered the rarer of the two; Woodward set a limit of $20 on the lead ("very rare"), but $50 on the brass ("unique") when he auctioned them together in 1874. Abe Kosoff's auction of the Robert Prann collection combined the worst known brass example with one of the finest known lead examples: the brass had an estimate of $125, realized $90; the lead an estimate of $150, realized $80. The last appearance of the brass and lead together was at the Roper sale in 1983, when the brass attained $3,740, the lead $3,960. Yet there are only four known of the lead (nearly unique, Rarity 8), but over a dozen now known of the brass (very rare, Rarity 6). Such are the vagaries of condition censuses and numismatic value. Clearly, there is a distrust of lead strikings among collectors, who do not want to watch a coin disintegrate before their eyes, as lead and tin are wont to do.

Two brass specimens apparently turned up in lots of Civil War tokens in the 1950s, needlessly, as Walter Breen says, throwing doubt on the genuineness of the piece; these lots were not true hoards, but dealer accumulations of junk copper.[12] I have been able to obtain the weights of twelve brass examples; there are not many more in brass currently known (although some may yet be lurking in other lots of jetons or Civil War tokens), and four in lead. The ANS has two genuine examples in its collection, both of brass: a corroded example given by John W. Garrett in 1923, which he acquired

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from Colonel James Ellsworth, and a fine example bought from David M. Bullowa in 1952, which had previously been in the collection of Homer K. Downing (fig. 3).

The coin itself is hotly disputed; some consider it a genuine colonial piece, others consider it a nineteenth century creation.[13] What is it? What was it intended for? When was it minted? The best way to answer these questions is to examine its peculiarities.

I believe the coin emerged from the same milieu as the English seventeenth century tradesmen's tokens of 1600-1673; I shall point out each of the peculiarities of the coin, and indicate how these peculiarities are consistent with the English seventeenth century token series.

It is a very peculiar coin indeed. One side has no legend, but a bucolic scene with Cupid and a maiden—Venus and Psyche have been suggested—the other side has a legend, New Yorke in America, with an eagle sitting on what looks like a branch.[14] There is a protrusion below the branch, which Michael Hodder has suggested is a "broad British arrow";[15] I believe, however, that this is only the tail of the eagle. Eagles' tails, as countless German thalers witness, are usually depicted with but three feathers.

The outstanding element of the coin is the final "E" in "YORKE." Fisk Brewer used this spelling as an argument for an early date, between 1664 and 1710, stating that the spelling with the final "E" was rarely used after 1710. Crosby, however, pointed out that the spelling with a final "E" was used on the reverse of the pattern for the Continental Dollar. This is true, of course, but it should also be pointed out that although the final "E" appears on the pewter patterns, it is dropped from the paper currency, an indication that by 1776 the spelling without the final "E" was more prevalent. This is a curious variation when we consider that the dies for the pewter patterns and the plates for the currency were made by the same man—Elisha Gallaudet.[16] This is unsurprising in light of Gallaudet's inconsistent orthography for the pewter patterns themselves, with CURRENCEY/CURRENCY. Another piece which uses this design with the names of the states is the "Happiness, Britain and America" medal of 1783 (Betts 614). The ANS specimen is too worn to be certain, but it *appears* as though it may spell New York with a final

"E." The standard catalogue of these medals, that of Charles Wyllys Betts, only increases the confusion; in the text Betts gives the spelling as "N. IORKE," but his engraving gives the spelling as "N. YORK."[17] The very rare American Congress reverse of the Fugio cent (Newman 1-CC) has the spelling "N.YORK."[18] The colors of the second New Hampshire Regiment of 1777, which also use the same design, use the spelling "N.YORK."[19] The spelling is confused, but in general it seems as though the spelling without the final "E" prevailed in the eighteenth century, with the odd exception such as Elisha Gallaudet with his peculiar orthography, and Gallaudet's imitators. In short, although the spelling with a final "E" is prevalent in the seventeenth century, and virtually disappears thereafter, it is not enough to allow us to date the coin more securely than that.

The coin has no date. Furthermore, the legend on the coin does not go all the way around, but stops about nine-thirty, the remaining space taken up by an arabesque. This peculiarity is easy enough to solve once we consider that this arabesque is where the date should be, and the date has been left off because the New Yorke in America token is a pattern; many English patterns (although not all) leave off the date. On the pattern halfpenny of Charles II, a date is lacking; once regular production of the halfpenny begins, the date appears in the exergue (fig. 4).

4. a) Pattern; b) dated 1673.

English seventeenth century tokens are known with spaces where the date should be. An interesting group is from Lymington in Hampshire (Hants.88 and 92).[20] Bartholomew Bulkly had a token made up which on the reverse has a space where we would normally expect a date. Bartholomew Harmood also had tokens made up, also

5. a) Hants.88; b) Hants.92, V.1; c) Hants.92, V.2.

lacking dates; but in his case there are two varieties, one where his last name is the full size, and another where it is reduced to cram it onto the flan. It is not clear which is the earlier and which the later variety. But it is interesting that all these tokens lack dates. Apparently stock reverse dies would be prepared in advance, and then the obverses made and the initials of the issuer punched into the center of the reverse die, and the date would be added. In the case of these three tokens, however, the date was omitted, and the remaining space is usually occupied by other punches, such as lozenges (fig. 5).

Patterns in England in the seventeenth century served slightly different purposes than ours do. Whereas modern patterns are distributed to influential persons, usually politicians, and not intended to circulate, the English seventeenth century patterns were test marketings of coin designs, and were often introduced into circulation. The Charles II pattern, QVATTVOR MARIA VINDICO, usually shows at least some wear. Many of the patterns in the Rosa Americana series also appear worn.[21] The New Yorke in America piece suffered a similar fate; it occurs in all grades, but always shows at least some wear.

The coin has a legend in English, not Latin; this use of the vernacular is characteristic of the Protestant coinages of the mid-seventeenth century, such as those of the Commonwealth, of the Brunswick duchies, and of Massachusetts. Significantly, one of the few English coinages of the mid-seventeenth century to use Latin is that of Lord Baltimore: an ostentatious use of Latin to emphasize the Roman Catholic faith of the Maryland colony. The legend also exhibits the fondness for the prepositional phrase such as we find on English seventeenth century legends: "At the Golden Hart in Leaden Hall Market A Sope Shop" (Lon.1702). "The Commonwealth of England. God With Us." "Massachusetts in New England." "The

6. a) Hants.12 in lead; b) Hants.12 in copper.

Rupee of Bombay."[22] In fact, such was the seventeenth century fondness for the preposition that this extended even to Latin legends, although Latin, because of its declensions, has less need for prepositions than English does. Hence the Latin legend: Carolus A Carolo.

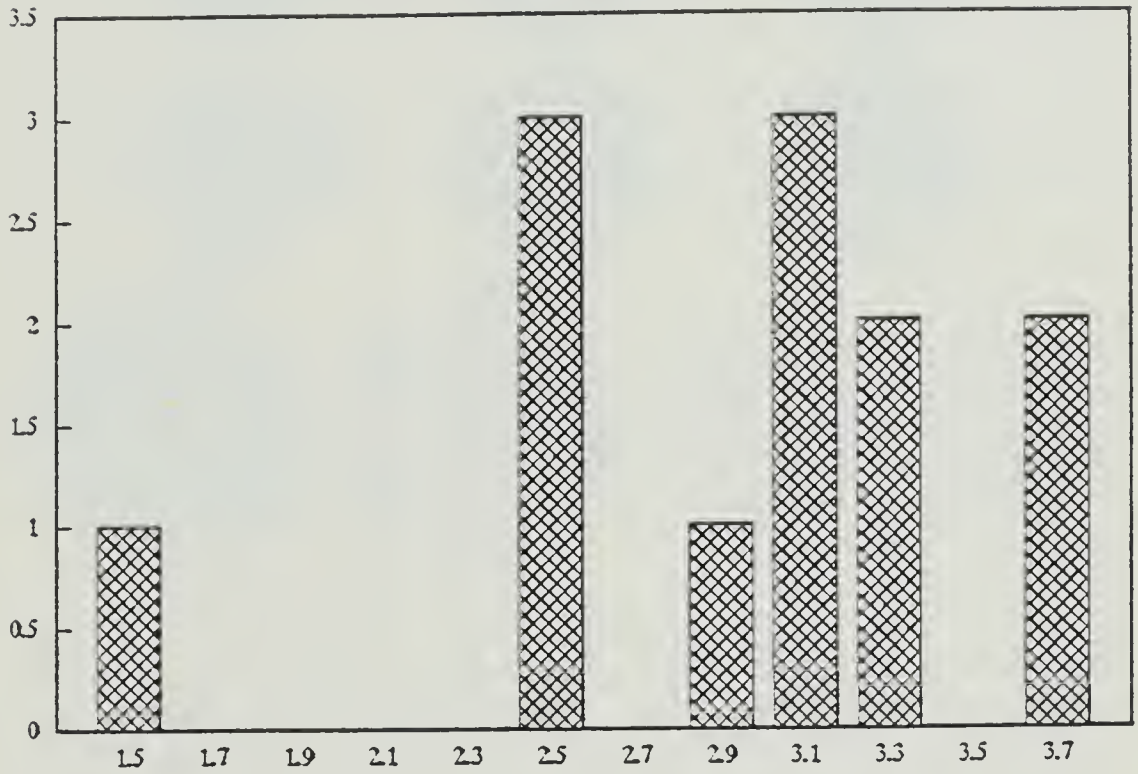
Another unusual factor is the striking of issues in both brass and what I presume to be lead. I have not been able to determine whether the token in white metal is made of lead or tin; I have opted for lead because of the use of this metal in many seventeenth century tokens, such as that of Bristol, and because of the battered appearance of the Appleton specimen. Issuing tokens in two metals is also consistent with English seventeenth century token issues. Not only were English tradesmen's tokens first issued in lead—the ANS has one issued by John Brown, a grocer of Bristol, in 1598—but there are even instances of simultaneous issues, with the same dies, of tokens in both copper and lead, as in examples from Andover of 1666 (Hants.12; fig. 6). The Norweb syllogae list a number of tokens issued in pewter or some other white metal—from Chester (Norweb 507, Ches.27), Cockermouth (Norweb 575, Cumb.4), Exeter (Norweb 707, Dev.134), and Thaxted (Norweb 1395, Ess.317). The seventeenth century, after all, was a period of experimentation with various base metal coinages. Copper fractional coins were themselves an innovation. Copper was the front runner, but it met with competition from lead and tin—during 1684-94 the Royal Mint coined farthings and halfpennies in tin.[23] Thus the same coin would be in circulation in the two metals at the same time. Tin was also the metal for another coin minted for the plantations in North America—the 1/24 real piece of James II.[24] The issue of the coin in these two metals—whether brass and lead, or brass and tin—is thus another argument for a seventeenth century date.

The weight of this coin is also unusual. I have assembled the weights of 12 examples, ranging from 1.35 g to 3.56 g (see Table 1). This is not enough for me to make a positive argument toward a weight standard, but it is enough, I feel to make the negative argument that these weights are inconsistent with regal farthings issued after 1672. Although it is the size of a farthing, it is lighter than any farthing coined after 1672; regal farthings weigh 4.72 g, Irish far-

**Table 1**

THE NEW YORKE TOKEN

(Observed Weights, in Grams)




things also weigh above 4 g. Even Irish counterfeit farthings are often heavier than the New Yorke piece. Nuremberg jetons of this diameter, by contrast, are too light, usually weighing about 1 g. Although we do not have anywhere near enough examples to determine the actual weight standard, the weights are fully consistent with English token issues of the seventeenth century, in particular the Bristol farthings of 1662 (peak between 2.7 and 2.9 g) and 1670 (peak between 2.9 and 3.1 g), as can be seen from Thompson's frequency tables for the Bristol token issues.[25]

The weights of three of the four lead examples are known: 4.017 g (Smithsonian), 4.31 g (Hague-Leiden), and 4.68 g (Roper). These are too few to draw any conclusions, although these weights are much lower than the regal tin farthings, which weighed above 5 g (a very worn ANS specimen of a William III farthing weighs 4.88 g).

The die axis is also peculiar: slightly off twelve o'clock (eleven o'clock, eleven-thirty, eleven-fifty-five have all been reported). Again, this is suggestive of the Bristol farthings of the 1670s, which have a twelve o'clock die orientation. The dies are often out of align-

ment; in fact, it is rare to find two examples of the coin with exactly the same die alignment. In one instance, namely the Roper-Terranova specimen (fig. 7), the misalignment of the dies causes the edges to overlap and results in a "gutter" on the left edge on the obverse. This "gutter effect" due to misaligned dies is also found on seventeenth century tokens as on one from Dorchester of 1669 (Dors.53; fig. 8).

The coin has a cinquefoil as its initial mark; although this type of punch occurs on many eighteenth century issues, it also occurs on Bristol farthings of 1662 and 1670 (fig. 9). Finally, our coin has a depression at 12 o'clock which Bullowa described as a counterstamp, but I think indicates where the coin has been holed and later skillfully plugged, with the initial mark restored, probably by using a punch.[26] The mark on the eagle's dexter wing is also consistent with a chisel or other cutting tool slipping when the coin was holed, although Anthony Terranova has suggested that the mark near the eagle's dexter wing may be a linen mark. Klein's Vicksburg cabinet, auctioned in 1888, had a pierced example, and I believe

10. a) Gloucs.117; b) Gloucs.213; c) Pine Tree shilling, Noe 33.

the ANS coin to be the identical specimen.[27] We find holed examples of seventeenth century tradesmen's tokens, as on two examples from Gloucestershire, and also of Massachusetts silver (fig. 10). So again, the holing of the coin is consistent with a seventeenth century origin. The fabric of the coin is similar to Bristol farthings; it is not at all similar to Dutch jetons (which it was originally thought to be); Dutch jetons are better struck, they are thicker, and they usually have broader flans (fig. 11). Dutch jetons were done by professionals; although the New Yorke in America token is a beautiful piece, the unevenness of the lettering shows that we are dealing with an amateur, rather than a mighty factory in Nuremberg or the Low

11. Dug.1969 (1554).

12.

countries. The coin does not have a mark of denomination, as the coins of James I, Charles I, the Commonwealth (including the issues of Massachusetts and Maryland), and the early coins of Charles II have. Finally, so far as style is concerned, the eagle is rather mannerist, as is the figure of Cupid on the obverse and the grove of trees; in the figure of the nude woman and the cloak which falls from her shoulders, however, we are beginning to get a hint of the Continental baroque, indicative of the Continental influences brought in upon the return of Charles II, plus the general moral laxity of the Restoration period.

A very striking correspondence in style is suggested by a token of Midhurst in Sussex (Sussex.127) which Richard G. Doty brought to my attention, where a tree has been treated very similarly (fig. 12). But is the tree on the token of Midhurst meant to represent a palm tree? Boyne-Williamson, the standard catalogue of English seventeenth century tokens, describes the piece as "two pilgrims near a palm tree." The *Victoria County History* doubts the existence of a seal for Midhurst. The Hospital of St. John did have extensive holdings in Midhurst in the middle ages, and it is possible that pilgrim imagery may have been used in lieu of a seal of Midhurst. On the other hand, James Dallaway, writing in 1815, says that the burghers of the borough of Midhurst "have a common seal, bearing as arms

'two foresters standing with their bows, on either side of an oak tree.'"[28] But the token clearly does not depict foresters with bows, nor an oak tree. Dallaway may have misdescribed the seal of Midhurst. At any rate, the token is the only representation of the arms of Midhurst that has come down to us, and thus has an added importance for English local history—in addition to whatever light it may shed on related style to the New Yorke in America token.

Another correspondence in style is provided by a token of Cirencester in Gloucestershire, where a phoenix is stylistically very similar to our eagle, especially in the depiction of the wings (Gloucs.44; fig. 13).

13.

14. Berry, *Encycl. Heraldica*, vol 3, pl. 51, 28.

The most puzzling part of the New Yorke piece is the eagle. The eagle only became part of the arms of New York on March 16, 1778 (four years earlier than it was adopted by the United States), but did not form part of the official seal in the colonial period.[29] But although the eagle did not form part of the official seal of the colony of New York, the Duke of York only forwarded a formal seal for the colony from England on July 4, 1669. A legal brief of 1713 by Governor Robert Hunter states that before then, and occasionally afterward, the governors used their personal seals to seal official documents.[30] Although the seals in the New York State Library in Albany were destroyed by the fire of 1911,[31] I have confirmed that this was the case by finding an example of the second governor of New York, Governor Francis Lovelace, sealing a commission in the Flatlands militia of April 1, 1669, with his personal seal, in the manuscript collection of the New-York Historical Society. Lovelace used two seals: a great seal with his full coat of arms—he used this on the commission in the Flatlands militia—and a small seal with the crest by itself, which he used when he signed the deed buying Staten Island from the Indians.[32]

The use by the first two governors of their own seals is of particular importance here since the coat of arms of Lovelace has as its crest, "On a staff, raguly, vert, an eagle, displayed, argent."[33] The question now becomes what a ragulated staff is. A ragulated staff is a heraldic depiction of a tree branch, with trapezoidal protuberances (fig. 14). This, I would argue, is precisely what our eagle is sitting on. Michael Hodder has argued that the ragulated fesse in the Lovelace crest must be vertical. This confusion has arisen because Hodder used Fairbairn's nineteenth century reference work about crests.[34] It is quite possible that Fairbairn is correct, that the proper way to display the Lovelace crest is with the fesse vertical; but that is not the way Francis Lovelace thought it should be. I have obtained a photograph of the small seal of Francis Lovelace from the British Library, and it is clear that the ragulated fesse is horizontal, not vertical (fig. 15).[35]

15.

This is the crucial point. In short, the New Yorke in America token has on its reverse an accurate depiction of the crest of the Lovelace arms. The issue is complicated, however, because New York has had not one, but two governors from the Lovelace family: Francis

Lovelace, during 1668-73, and John Lovelace, in 1708-9. But I think it is clear enough that the New Yorke piece was issued by the first governor Lovelace. The second governor Lovelace was taken ill on his voyage to New York City, and arrived in December 1708. What energy he had was taken up clearing up the mess left behind by Viscount Cornbury, who as governor of New York and New Jersey had put the provinces into turmoil. Viscount Cornbury persecuted Jews and Presbyterians, an odd combination; established a political machine, the Cornbury Ring; was the first historically recorded recipient of a bribe in the State of New Jersey; and according to some accounts and a painting on the fourth floor of the New-York Historical Society, was a transvestite who regularly wore dresses to bring out his resemblance to his cousin, Queen Anne.[36] (We must remember, however, that our view of Cornbury relies heavily on calumnies by his political opponents. It is possible that a revisionist biography will put him in a better light.) John Lovelace, at any rate, was overwhelmed by work and his illness, and he died of apoplexy on May 6, 1709.[37] John Lovelace was governor for too short a period and had too many other concerns to devote much time to coinage proposals. The reign of Queen Anne was also a period when England attempted to tighten its restrictions on issuance of coin or "crying up" of money in North America. For example, on July 3, 1709, an order of the Queen in council disallowed the provincial act which would have raised the values of Spanish colonial pieces of eight.[38]

Francis Lovelace, on the other hand, not only was governor of New York for nearly five years; he was governor at a time when the fractional coinage of England was in a parlous state, and private issuers could get away with issuing copper, lead, and tin tokens. Lovelace had fought on the Royalist side during the English Civil War, and so it made sense to reward him with the governorship (actually deputy governor, since James, Duke of York, was formally the governor) of New York. The best accounts of his life say that he was the brother of Richard Lovelace, the cavalier poet, noted for two famous phrases:

> Stone walls do not a prison make
> Nor iron bars a cage;

(from his *To Althea, from Prison*), and

> I could not love thee, dear, half so much,
> Loved I not honour more.

(from *To Lucasta, on going to the Warres*).

Although this cannot be regarded as absolutely certain (since there

were three Francis Lovelaces active at this time in the seventeenth century) the fact that both Francis Lovelace, the governor, and Francis and Richard Lovelace, the cavaliers, had a brother named Dudley Lovelace, suggest the identity of the governor and the poet's brother. Richard Lovelace's poetry led Richardson to name the coxcomb protagonist of *Clarissa* Lovelace, and so the name became a synonym in English and in French for a Lothario.

As governor, Francis Lovelace showed a praiseworthy tolerance of the various religions represented in New York and attempted to assuage the feelings of the newly conquered Dutch. He worked at establishing a regular mail service with the New England colonies, and tried to foster economic development, not least through encouraging whaling on Long Island. He was very idiosyncratic in his prose style; thus he wrote to Secretary Williamson on 3 October 1670:

> I cannot but acknowledge your high civilety to mee, for a remembrance, to affourd us, what is acted on the stage of Brittany, if you did but know in what darkness wee live, as if wee had as well crost Lethe, as the Athlantiq ocean, so that the effects are commonly past with you, before the causes arrive us, you could not but take compassion on us, and at your leisure (which if any) solace us, with what newes is stirring, for wee love the sound of Greeke though wee understand it not.[39]

He acquired a large estate on Staten Island, purchasing it from the Indians (commemorated by Lovelace Avenue[40] on Staten Island) and practiced extensive nepotism, placing his brothers Thomas and Dudley Lovelace in important positions. When the third Anglo-Dutch War broke out in 1672, Lovelace was caught unprepared. While he was on a trip to New Haven, a Dutch fleet sailed up the Eastern seaboard and captured New York in August 1673. On his return to England, he was thrown into the Tower and an investigation made of his governorship, but he fell ill and was released before a full investigation could be made. Lengthy lawsuits were pursued by his heirs.[41] He died in the latter half of 1675 at Woodstock in Oxfordshire.[42]

In short, the reverse of the New Yorke in America token shows the arms of Francis Lovelace, the governor of New York from 1668 to 1673; and those arms also served as the seal of the Colony of New York. The New Yorke in America token is a farthing issued under Governor Lovelace, with the crest of his own arms serving as the arms of New York.

What then is the obverse of this coin? First, who is the maiden? I am obliged to Brooks Emmons Levy who pointed out that it must be Psyche. This is because the maiden has a protuberance behind her shoulder which is a diaphanous, butterfly-like wing—a traditional attribute of Psyche. The identification of the soul, psyche, with the butterfly is an ancient one, and goes back to the Pythagorean brotherhood; the idea of the soul having wings, particularly developed when the soul is in love, is familiar from Plato's *Phaedrus* (Steph.246-56). So the obverse represents Cupid, having just shot Psyche with an arrow, beneath a grove of palm trees.

What is the obverse supposed to represent? I think it must be a rebus on the name "Lovelace." Rebuses are used on seventeenth century tokens to represent names of people and towns: for example, a token of Gateshead has a goat's head as its device (Durham.46) and John Oulef of Tewkesbury in Gloucestershire has a dove with an olive branch in its beak on his token (olive/oulef; Gloucs.196). As a compound word, lovelace has not been used in English since the fourteenth century; but there is a good seventeenth century citation to Edward Fairfax's 1600 translation of Torquato Tasso's *Gerusalemme liberata*, where Fairfax uses the line, "The king had snared been in loues strong lace," to describe the snare of Love. This was an influential usage, and is cited in both the *Oxford English Dictionary* and in the first edition of Samuel Johnson's *Dictionary of the English Language* (1755).

An examination was made of emblem books of the period for a depiction of love as a snare. The use of emblems is well known for paper money—the emblems on the Continental currency—and on coins, the sundial emblem on the Fugio cent and the emblematic thalers of Brunswick-Lüneburg.[43] In the case of the Brunswick coins, the derivation from emblems was quite explicit: the mint records for 1676 contain the remark "Emblematische getoppelte Schauthaler verfertigt" ("Emblematic double medallic thalers have been prepared").[44] However, I failed to find, in over a dozen books of love emblems, an identical emblem to the one on the token. I believe the artist who designed the token was not inspired directly from an emblem book, but there are emblems that have certain resemblances, which help us see how a seventeenth century person would visualize "lovelace." There is an interesting example in the *Amorum Emblemata* of Otto Vaenius (Octav van Veen, an eminent painter and the teacher of Peter Paul Rubens), published at Antwerp in 1608. The Italian emblem uses words very close to the name "Lovelace": "Dolci lacci d'Amore." Here we see one Cupid trying to ensnare another with ropes; the emblem reads:

Ludendo capimur, bibimus ridendo venenum,
Atque iocos inter vincula miscet Amor.
Si timeas laqueos, et si te vincula terrent,
Terreat et lusus lustraque; liber eris.

Or translated:

Whilst playing we are caught, laughing we drink poison;
Love mixes jokes among the chains.
If you fear nooses, if chains frighten you,
Then fear also games and bosquets; you will be free.

This quotation sounded very familiar, and I originally thought it might be from some classical author; but I could find no reference to it in the *Thesaurus Linguae Latinae*. In fact, although it resembles many tropes we find in Ovid and other authors, it has some blemishes which we would not find in a true classical author: the lack of *variatio* by repeating vincula between the second and third lines, the false quantities in scansion of the first line, where the o in ludendo is short, yet the o in ridendo is long, and finally the ugly rhyme brought about by juxtaposing ludendo and ridendo. So I think this emblem must be a seventeenth century creation, quite possibly by Vaenius himself.

16.

The key word here is "lustra"; unfortunately, the printer in the original has this word wrong, printing lucta for what I think we must emend to lustra. A lustrum is a wooded grove, but also a place of debauchery, a bagnio, a bordello. Notice also the use in the French emblem of the word "embuscade," which is also related to bosquet; and finally the depiction of a grove of trees in the emblem itself (fig. 16).Love plants his snares, his lace, in a wooded grove; just like the wooded grove depicted on the obverse of the New Yorke in America token. A wooded grove is depicted partly because it is an ideal place for an ambush, but also because of the play on the word lustrum.[45]

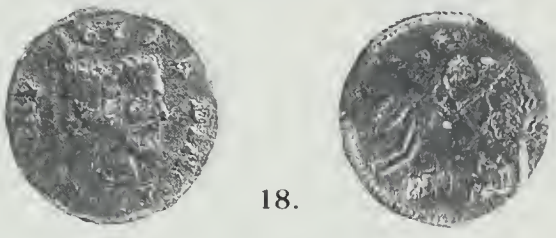
The gesture by Cupid is indeed unusual; he could be raising his left arm because he is pulling on a noose in which he has entrapped Psyche; or again he could have just shot an arrow, as is the case in a painting, "Lovesickness," by Jan Steen, which is now in the Alte Pinakothek in Munich. On higher grade examples than the ANS piece, it is clear that Psyche has just been hit in the breast by an arrow. That is why her hand rests upon her breast.

A question I have been unable to solve is why a grove of palm trees. I have suggested that since both Cupid and Psyche are nude, it helps to be in a warm climate where palms grow. Another possibility is that this was the only tree the die cutter could depict, as on the token from Midhurst in Sussex. Art historians have found these explanations rather too pragmatic. A palm as an emblem means strength.[46] It does occur on coins, used as an emblem: the "emblematischer Schauthaler" of the Duchy of Brunswick of the 1670s (Dav.6573).[47] If we read the palm as meaning strength, then the obverse of the New Yorke in America token, read from left to right, reads like Fairfax's Tasso: "love's strong lace." But this may be reading too much into the emblem.

Finally, I have emphasized throughout the similarities between the New Yorke in America piece and the English tradesmen's tokens issued between 1650 and 1673. I consider the piece of English manufacture. I am most impressed by the similarities between this piece and tokens issued in the West country of England. In an attempt to get a clearer picture, I examined three major compilations of English tradesmen's tokens of the seventeenth century, looking for tokens which like our coin have a mute obverse: the type occupies the entire field of the coin. These tokens are unusual, but not unknown, particularly among the town pieces, as tokens issued by municipal corporations are called. The three compilations I examined were the Boyne-Williamson catalogue, which unfortunately has no plates; the Norweb syllogae, which have excellent plates, but only extend through Gloucestershire (ten more volumes are in

preparation); and finally our own collection which was given to the ANS by Mrs. Norweb in the 1960s, plus tokens bought in a Glendining's sale in 1951, which combined give us one of the top three collections in the world for these tokens. I excluded from my list tokens which had any inscription on them, even if it was only initials; and I also excluded an important sub-variety of town piece, namely those with arms depicted within a shield.[48] A map constructed by ANS Registrar, Johanna Bergmann, of all the pieces with a design only on one side, and that design not within a shield, reveals an interesting pattern, with most of these coins coming from the

West of England, or from places near enough to the seacoast so that the Bristol coasting trade would provide close connections with the West of England (fig. 17). There are also Irish tokens with mute obverses; unfortunately our collection is not as good as it should be in that particular area, and the Norweb syllogae will not reach Ireland until another five years have passed. But from what I can tell, most of these Irish pieces come from County Cork and County Kerry, especially the former;[49] in other words the two southernmost counties of Ireland, and those which are closest to Bristol by sea. The Cork municipal tokens, in particular, are very similar to the Bristol pieces. Of special interest is the piece from Dingle in County Kerry, issued in 1679, because it has an oversized Cupid shooting at two lovers seated beneath a tree (fig. 18). The style is very different, but it is significant that an erotic subject could be considered suitable for Dingle, as well as for New York.



18.

I would argue that the mute obverse of our piece indicates it was made at or in the area around Bristol around 1670; this is suggested by the geographical distribution of coins with mute obverses, and is also what we might expect, given the importance of Bristol in the trade with British North America.

I consider the coin itself too crude to have been made in the actual Bristol mint, which was by all accounts a very professional operation, but think it was made in the region around Bristol, patterned after Bristol designs and struck according to the weight standard of the Bristol farthing.[50] I have looked to see if there were any obvious punch links between the New Yorke in America piece and the Bristol farthings. There are not, because the Bristol pieces use punches of a larger size. But the makers of seventeenth century tokens did use sets of punches of multiple sizes, so if they ran out of room (as happened on the Dorchester tokens) they could switch to a smaller punch size. I believe that this happened on the New Yorke piece as well. The eagle was first cut into the die; but when the time came to make the legend, a smaller punch face had to be used because the normal punch size would not fit. This miscalculation of the size of the type (that is, the image) on a coin, so that the type interrupts the legend, is found on many other coins issued

by comparatively unskilled mints, such as the Roman bronzes of Antioch.[51]

**The Monetary Situation in Seventeenth Century New York**

The monetary situation in New York in the 1670s was what is familiar to us in other colonies: a chronic need for silver and for small change, and the use of many ingenious substitutes. Wampum, and a variant of wampum, seawant, were commonly used.[52] Beaver skins were another substitute, with a rate in 1668 set at 3 beaver skins equal to 40 shillings.[53] Liquor was a popular monetary substitute; it kept well, and was easy to split to make change. In 1669 the sheriff of New York, John Manning, paid the expenses of the trial and execution of the infanticide Angle Hendrickson with French wine and brandy. The jury, for example, received 12 shillings worth of French wine—presumably after, not before, they concluded their deliberations.[54] The subscription list for the repair of Fort James on July 14, 1672, gives us a picture of the monetary substitutes in use: some subscriptions were paid in seawant, wampum, and beaver skins. Many subscriptions were paid in kind through goods—beer, corn, a barrel of beef—others were paid in services—"een broeck te maeken" (Dutch for making one pair of trousers—both languages are used interchangeably in this document), "one day Carpenters Labour," others are miscellaneous "Country pay" (presumably flour).[55] Some coins were already in circulation: a burglar on March 16, 1668/9 at Alexander Frizzell's stole ten pieces of eight and one "Ducatoone" out of a chest.[56] A declaration issued under Lovelace's governorship indicates that the chief silver coins in circulation were Massachusetts silver coin and pieces of eight from Mexico, Spain, and Potosí:

> Whereas it is thought expedient that certain regulacon should be made upon the Sylver Coyne which passeth to and fro in this Government, by the certainty of its value, It is Ordered that a Boston Shilling shall passe for one shilling a good piece of Eight Spanish Coine of Mexico Sevill or a pillar piece shall be valued and go for six shillings in any payment either for Debt or demands or purchasing goods or Merchandize between Man and man.[57]

The problem of the lack of coin in New York was clear to Lovelace's successor, Governor Andros. Andros toyed with the idea of counterstamping pieces of eight so that they would have a higher value in New York money and so stay within the Colony. The

secretary of the Duke of York, Sir John Weyden, wrote to Andros on September 15, 1675, that Andros could not do that without a patent from the king; on the other hand, nothing stood in the way of the importation of farthings:

> As to what you propose about peeces of 8/8 to be marked by you to pass for such a value as you shall put upon y$^{m}$, I'me informed that they may be current money any where, according to their true value (as now in England) but noe proclamacôn by y$^{e}$ Duke ought to make y$^{m}$ soe without the Kings express authority to him under y$^{e}$ Great Seale for y$^{t}$ purpose; y$^{e}$ like also for putting any stamp or mark upon y$^{m}$; soe as it is not worthy your further thoughts what proffitt will result from these things before we goe about to gett the King's grant to y$^{t}$ effect.
>
> I'me also told that noe law prohibitts y$^{e}$ sending our brass farthings thither if it be worth y$^{e}$ while to carry y$^{m}$ thither.[58]

The Duke of York himself also considered this matter, writing to Andros on April 6, 1675:

> As to y$^{e}$ money for ordinary commerce w$^{ch}$ you complaine of, there appeares not any present remedy for y$^{e}$ inconvenience, unless I should be at y$^{e}$ chardge of coyneing so many thousand pounds as 'tis not convenient for me at present to lay out, but indeed if money were coyned, unless of a lower rate y$^{n}$ that of your neighbours (w$^{ch}$ would y$^{n}$ impoverish yo$^{r}$ country) it would soon be carryed away againe from you. My Secretary tells me y$^{t}$ upon discourse with some merchants on y$^{s}$ hand, he hath mett w$^{th}$ a projet mencôned by y$^{m}$ viz$^{t}$ to send £10000 in money, provided it should be taken of only in Beaver, in specie, at such value as may compensate y$^{e}$ hazard they run and the advantage that hath about y$^{e}$ commodityes w$^{ch}$ you usually barter for. But y$^{s}$ is (as I have said) only a notion as yett, and I thinke unless you propose some way from thence how to effect y$^{s}$ thing, it will have but little life from hence.[59]

Clearly Sir John Weyden and the Duke of York felt that they could take some actions in providing New York with a circulating medium; by 1675 they were perhaps limited to shipping farthings, although it is possible Sir John felt Andros could have the farthings specially made up. But before 1672, when regal farthings were issued and orders made against private issues,[60] a colonial deputy governor

could consider himself well within his rights in issuing farthing tokens in his own name. If cities in England could do so, why not, a fortiori, a municipality on the other side of the Atlantic? Luke Nourse, the mayor of Gloucester, did so on behalf of the borough of Gloucester, and he put his name on that corporate issue (Gloucs.77-79). Governor Tuckar of the Somers Islands (Bermuda) likewise had had coins struck in base metals and had gone unpunished.[61]

As we might expect, given the chronic need for coinage in the American colonies, many English tradesmen's tokens of the seventeenth century found their way here; sometimes after the tokens had ceased to serve a purpose in their homeland (i.e. after 1672). An earlier experiment with small copper farthings—issued not by the king, but by noblemen given royal patents—did lead to these farthings finding their way to Wolstenholme Towne in Virginia, which was destroyed in the uprising of 1622.[62] Later the private token issues of 1648-78 made their way to North America. A London newspaper, *The Loyal Impartial Mercury*, of October 6, 1682, mentioned that 40 Quakers were fitting out from Bristol for Pennsylvania, and that they were taking 300 pounds worth of halfpence and farthings with them. Walter Breen has discussed what these halfpence and farthings might have been, and the most probable identification is that they were private token issues of 1648-78.[63] One private token was found during the excavations at Jamestown in the 1950s; it was issued by Henry Jenner of Portsmouth in Hampshire, and is dated 1656 (Hants.147).[64] In the course of dealing with the random grab bag of coin inquiries, two casual finds of such tokens have been reported to me: one in a backyard in Philadelphia reported in July 1991 (Surr.274; Rotherhithe); another was found in southern New Jersey (Yorks.95; Guisburne, 1666). In the *CNL* for July 1979 another English tradesmen's token was reported, which had been found with a "small group of Connecticut coppers from the Taunton, Mass. area"; although this may be part of a collector's accumulation. It was identified as a halfpenny from Boston in Lincolnshire (Lincs.15).[65] In 1980 a hoard of eight tradesmen's tokens was found in the Hamptons on Long Island, and the coins were photographed at the ANS; they are all private issues from Maidstone in Kent, one is dated 1664, and three 1670 (including one coin which is present twice). The rest are not dated. The coins are Kent.380, 381 (twice: die duplicates), 385, 392, 393, 397, and 398.[66] Another non-collector assortment in the United States where a trade token turned up was in western Pennsylvania in the 1870s. The token was from Wellington in Somerset (Som.299), and was

donated to the ANS by George H. Clapp in 1946 (ANS 1946.43.1). Clapp described it as follows:

> I promised the Western Pennsylvania Historical Society of Pittsburgh to give them some coins which, as a boy, I had picked up at the Toll bridge across the Allegheny River, and in digging them out I found two coins which I enclose for your collection, if wanted. I well remember the ancient English (?) one which came with a miscellaneous lot of small Roman bronzes, but the English "Trade Token" I do not remember at all and it may be worth while, I hope so.
>
> At the time I made my "bridge collection," in the early Seventies, large cents were quite common but generally in worn or battered condition. Due to the shortage of small silver, although 3¢, 5¢, and dimes were rather plentiful, many small foreign coins were slipped in during rush hours. The toll was 1¢ for a foot passenger and the Toll taker, a good natured Irishman who liked small boys, would throw all of the "odds and ends" into a box to save them for the boys, and we got them at "cost". We were satisfied with "one of a date" in cents and so would trade our duplicates. Many collections were started in this way.[67]

The Roman bronze, it becomes clear from Clapp's later letters, was not in circulation in western Pennsylvania in the 1870s; but the trade token apparently was.

## Conclusion

What has hitherto been called the New Yorke in America token was, in my opinion, a coin struck under Governor Francis Lovelace—in other words, in the period 1668-73—with a rebus upon lovelace as its obverse, and the crest of the Lovelace arms serving as the New York provincial arms on the reverse. The lack of date may indicate that the coin was a pattern farthing, but it did enter circulation. All examples show at least some wear. It does not seem very likely that any of the coins ended up in North America.

Little can be told from pedigree, because so much could have happened in the two centuries between the striking of the coins and the earliest pedigrees, but it is interesting that many of the pedigrees go back to Europe: one piece in the Hague, one piece in Leiden donated by Roye van Wichen, Grotefend's collection from Hannover, three pieces in the Legras collection of Paris, one in the

Fonrobert collection of Berlin, two coins in Jacques Schulman sales in Amsterdam, one piece "imported from the Continent of Europe" by William P. Brown. If the George M. Klein of Vicksburg, MS, is related to Francis Joseph Klein, who Attinelli says obtained most of his coins from Europe,[68] then the Vicksburg piece also has a Continental pedigree. The Baches are an old New York family—a Theophylact Bache signed the New York paper money issue of February 16, 1771[69]—and the Bache piece could have been acquired in either the United States or England. The rarities which Strobridge mentions as being in the Bache cabinet—the Virginia silver pattern halfpenny, Hancock's Roman head Washington—probably came from England. Any guess as to how the other coins went from Bristol to the Continent is as good as another; they might have been shipped over in a lot during the French Revolutionary wars, when the demand for copper skyrocketed. It is curious that the eagle side usually shows much more wear than the Cupid and Psyche side; almost as if the owner wished to eliminate all trace of this early attempt at an independent coinage for New York. The Smithsonian lead specimen has gashes on the eagle side, as if someone were cancelling the token. Perhaps this was done on some specimens before they were shipped to the Continent. As to why the coins themselves never reached New York, nor got into the historical literature, the sudden Dutch recapture of New York in 1673 provides a possible explanation. Only the coins themselves remain to bear witness to this failed experiment.

## Fabrications

The New Yorke in America token has been considered by some—incorrectly, in my view—to be a nineteenth century fabrication. But although the New Yorke token itself is genuine, it was a source of inspiration for fabrications. It is instructive to examine these fabrications, to see what nineteenth century numismatists imagined early New York coins would look like; the fabrications in themselves are a significant part of the study of numismatics in this country.

The first numismatists to become aware of the New Yorke in America token were at Yale; and a leading figure in the New Haven Numismatic Society (established 1862) was Charles Wyllys Betts. Betts was born on August 3, 1845, at his family's country house in Newburgh, New York. Newburgh has a malevolent *genius loci*, for it also produced Thomas Machin. Betts graduated from Yale in 1867. He went to Columbia College Law School, and graduated from it

in 1869. He practiced law for two years, and then went back to New Haven to do graduate work in history and literature. But he did not complete his Ph.D., returning to law in March 1873, with a firm which eventually became Betts, Atterbury & Betts. The firm specialized in patent law, in which Betts was an acknowledged authority. Unmarried, he died after a week's bout with pneumonia on April 27, 1887, at the age of 41. He was a major donor of coins throughout his life to the Yale cabinet; Jonathan Edwards notes that Betts donated 1,303 tokens, medals, and coins between 1865 and 1880. He also made two donations to the ANS, in February and April 1886, totaling 79 coins. Most of these, however, were fairly low grade early American coins, but these donations did include a run of Admiral Vernon medals, a pine tree sixpence (Noe 33, ANS 1886.3.2), a counterfeit George III halfpenny dated 1775 (ANS 1886.3.1) and some Rosa Americana coins. His brother, Benjamin Betts, was far more active in the ANS, as a donor and an officer. By his will Charles Wyllys Betts bequeathed some early carved oak chests and chairs, as well as many coins, to Yale.[70]

In the ANS collection there is a die by Betts dated 1860, with the inscription CHAS. WYLLYS BETTS NEW HAVEN COINS MEDALS &c. 1860. This would make Betts no older than 15 when he created this storecard; but then numismatics has known many "Wunderkinder." Betts created a number of fabrications, some clearly inspired by the New Yorke in America token. They were extremely crude, often made of lead, hot rolled between two copper dies.[71] Betts created two fabrications of early New York coins: the Colony of New Yorke, which with its peculiar use of the spelling of New York certainly must have been inspired by the New Yorke in America piece, and the Novum Belgium piece allegedly issued by Pieter Minuit with the date of 1623 (fig. 19). These pieces are

19a.

19b.

very crude; the dies were cut with a knife (although Betts was later given a set of punches) and they are usually in lead, although the ANS has some examples in copper, and Woodward once auctioned a Betts fabrication in silver. Crude although these pieces are, the Pieter Minuit piece did take in the coin dealer Édouard Frossard. Their first appearance at auction was William Elliot Woodward's sale of April 28-May 1, 1863, in a section forthrightly called "Fabrications." Woodward wrote above this section, "The following pieces possess a degree of interest, some on account of their origin, and some for their rarity. As they do not properly come in any distinct class, they are here thrown together under the above head." Woodward and Betts at least had the virtue of admitting that these pieces were fabrications. Their next sale of Betts fabrications, however, was rather more questionable. This, the auction of Betts's collection in May 1864, contained a note from Woodward, "Very many of the pieces here offered, are struck from excessively rare dies, recently engraved, *all of which are destroyed*; and every piece being the best in existence, it is the sincere wish of the owner that they meet with satisfaction." This, however, was a lie, because the dies were not destroyed; they are preserved at the ANS, the gift of Frederick C. C. Boyd in 1950. Betts did, however, confess to the creation of these fabrications in 1878 when Frossard was taken in, and he also donated a set of them to the Yale cabinet. Unfortunately, they are no longer there; presumably they were destroyed or stolen during the theft of the Brasher doubloon.[72]

Did Charles Wyllys Betts make these fabrications just for the fun of it? Or did he intend to deceive collectors, and profit thereby? His ready confession to Frossard in 1878, his donation of examples to the Yale cabinet, his forthright description of them as fabrications in 1863, all suggest that he was honest. On the other hand, Betts's remark that the dies had been destroyed in 1863, when they had not been, suggests otherwise—although Betts may have regarded putting a scratch into a die as destroying them. (There are, however, no visible cancellation scratches in the ANS set of Betts dies.) Betts certainly made very real contributions to numismatic scholarship, most notably through his catalogue of early American medals which Lyman Haines Low published after Betts's death. It would be good if Yale, the alma mater of Newell, could honor Betts likewise; but it is very likely that in Betts Yale produced a numismatic rogue. A final solution to the puzzle of Charles Wyllys Betts could be reached if we could solve the puzzle of the "New Haven restrike" Fugio dies. If Betts created these, or passed them off, as the traditional story has it, then he is guilty; but if Betts was not associated with

them, or was an innocent dupe of someone like Horatio N. Rust, then he is innocent. Opinions are still divided on this matter.[73]

It is interesting to note that the Appleton specimen of the New Yorke in America token is in such poor condition that one writer (probably either Lyman Haines Low or David Proskey) suggested that it was made by Betts, writing in the *Coin Collector's Journal* of March 1887, that the "one in lead generally supposed to be genuine is, perhaps, a copy of *New Haven* manufacture—certainly a very doubtful piece." The Appleton specimen is in poor condition, but it is almost certainly genuine.

These fabrications are important for two reasons: first of all, they show the influence of the New Yorke in America token on the numismatic community, and secondly they show us what nineteenth century fabrications looked like; by comparing the New Yorke in America token with the fakes, we can understand the elements which distinguish the genuine from the nineteenth century creations.

## Provenance[74]

Tracing the provenance of coins has been called by one very eminent numismatist "the least important branch of all numismatics." The collector certainly feels a thrill in holding a coin which was held by Cogan or Mickley before him, and the dealer feels a thrill in marking up the price accordingly; but of what interest is provenance to the scholar? I can only answer for myself and explain why I assembled the provenances of these coins. I attempted to locate the weights of as many examples as I could find, and once I had finished writing to major collections, I then turned to recent auction sales. Naturally I did not want to count the same coin twice. For this reason I began to trace the recent provenances of some of the coins. I next was interested in determining the original sources of the coins, because that would in part determine whether the piece was genuine or a nineteenth century fabrication. This led me to read through the early auction catalogues from 1859 to about 1890, trying to find every occurrence of the New Yorke in America token. Curiously, many pedigrees go back to the Continent of Europe, as may be seen with the Smithsonian brass example, the Fonrobert specimen, the three pieces in the Legras collection, the Grotefend specimen, and the two examples now in Holland. Finally, having gone through the early sales and some of the recent sales, I became tempted to try and link up the pedigrees, and solve questions such as "Who is the present owner of the coin depicted in the plate in Crosby?" (Smithsonian Institution.) It is also interesting to note

which four coins were known to Crosby: they were the first three lead examples, plus the brass Parmelee-Norweb-Smithsonian specimen. These reconstructed pedigrees are still very tentative, especially for the brass specimens.

*Lead examples:*

1) 4.017 g (61.99 gr). Acquired by Robert E. Bache of New York, who died in England about 1834; sent back to New York, where it reposed in the vaults of the Atlantic Bank, Brooklyn, undisturbed until 1864 when it was sold to William Elliot Woodward, who auctioned it Mar. 20-25, 1865, 2635 at a limit of $150, when it did not sell; auctioned by William Elliot Woodward, Feb. 23-26, 1874, 379, when it was bought in by George A. Leavitt, the auctioneer, at $20; sold by Woodward in the spring of 1876 to Dr. Thomas Hall, who paid $30 for it;[75] acquired by Virgil Michael Brand with the rest of Hall collection, Sept. 7, 1909; to the Brand estate on the death of Virgil Brand, 1926; to Horace Brand when the Brand estate was divided, 1934; auctioned with coins from Linton L. Fraser of Brooklyn, New York, by Thomas L. Elder, May 8-9, 1936, 1291, price realized unknown; B. Max Mehl; sold by Mehl, Jan. 11, 1937 to Emery May Norweb for $50; donated by Mrs. Norweb, Dec. 28, 1982 to the Smithsonian Institution.[76]

2) 4.31 g (66.51 gr); 11 o'clock. Before 1853 at the Koninklijk Penningkabinet (the Royal coin cabinet of the Netherlands) in the Hague, according to J. F. G. Meijer in 1861 (*Historical Magazine*, Oct. 1861); this cabinet was transferred to Leiden in 1986, and this coin was among it. Koninklijk Penningkabinet inventory number 16191, but provenance unknown before 1853.

An electrotype was made of this before May 1861, and electrotypes made of this electrotype. The electrotype was given to the Yale cabinet by Brewer, but is no longer there; presumably it was lost during the Brasher doubloon theft. The "granddaughter" electrotypes are very common; the ANS has six.

3) In the collection of William Sumner Appleton after Apr. 28, 1870 (when Appleton exhibited his coins) and before July 1875, when it was mentioned by Crosby; Appleton died Apr. 28, 1903, and in 1905 his collection was given under the terms of his bequest to the Massachusetts Historical Society; auctioned by Stack's at the ANA convention, Aug. 24, 1976, 71, realized $3,600; Philip Warner,

whose collection was sold Jan. 21, 1980, by Robert L. Hughes Enterprises, lot 77, realized $4,500.

Although this coin was known to Crosby, and has been at auction twice in recent decades, the weight has never been published.

4) 4.68 g (72.2 gr). Philippe-Édouard Legras,[77] whose collection was auctioned in Paris by C. van Peteghem, Dec. 11-15, 1882, 816, no condition given, but described as "Pièce semblable en étain" to the two in brass, which were "Frustes," realized 21 francs; Georg F. Ulex of Hamburg, whose collection was auctioned by Lyman Haines Low, July 8, 1902, 39, "Very fine," realized $32; collection of H. H. Butler, auctioned by Thomas L. Elder, June 5, 1917, 150, "About uncirculated and unquestionably the finest known specimen of this excessively rare piece"; auctioned by Barney Bluestone, Feb. 17-18, 1933, 653, "Ex. F.";[78] "Collection of Jascha Heifetz and others," auctioned by J. C. Morgenthau & Co. (cataloguers: Wayte Raymond and James G. Macallister), Mar. 15-16, 1938, 291, "about perfect and exceedingly rare," realized $75; Robert R. Prann,[79] auctioned by Abe Kosoff and Abner Kreisberg at the ANA convention, Aug. 26-27, 1947, 575, "Extremely fine," estimate $150, realized $80;[80] John J. Ford, Jr.;[81] to Theodore L. Craige before Apr. 10, 1964;[82] Benedetti, Gore collection, auctioned by Bowers and Ruddy as part of the Kensington collection, Dec. 12-13, 1975, 258, "Extremely fine," realized $10,500; John L. Roper II, whose collection was auctioned by Stack's on Dec. 8-9, 1983, 146 "a strong Very Fine," realized $3,960.[83]

*Brass examples:*

1) 3.15 g (48.61 gr). Colonel Adam Jan Bernard de Roye van Wichen;[84] donated by him to the State University of Leiden in 1851; still there today, although curated as part of the Dutch Royal Coin Cabinet.

2) 3.530 g (54.48 gr). Found in a lot of Nuremberg and French jetons imported from Europe by William P. Brown,[85] auctioned by William Elliot Woodward on Feb. 24-26, 1874, 378, bought in by Woodward for $50; in the collection of Lorin G. Parmelee before July 1875, used as the photograph for the plate in Crosby's *Early Coins of America*, in the Parmelee auction on June 15, 1890 (ill.), realized $9.50; James ten Eyck, whose collection was auctioned by B. Max Mehl on May 2, 1922 and this coin realized $105; Waldo Newcomer;[86] B. Max Mehl, sold for $135 on Jan. 11, 1937, to

Emery May Norweb; donated by Mrs. Norweb, Dec. 28, 1982, to the Smithsonian Institution.[87]

3) Grotefend collection, of Hannover, auctioned by S. K. Harzfeld, Oct. 25-26, 1877, 66, realized $5 "on account of its poor preservation," according to Frossard;[88] H. G. Brown collection, auctioned by Lyman Haines Low, Apr. 19, 1905, 125, "fair," realized $1.25; "From Tompkinstown," auctioned by Lyman Haines Low, June 17, 1905, 544, "fair," realized $15.

4) 2.89 g (44.6 gr). Jules Fonrobert, whose collection was auctioned by Adolph Weyl, 1878, 2713, where it realized 50 marks ($11.90); Charles Wyllys Betts, auctioned by Edward Cogan, September 16-20, 1878 when it realized $12; to Edward Frossard?; to George M. Parsons?;[89] sold by Edward Frossard on Oct. 21-22, 1881; bought by Henry Griswold Sampson for $13.50; sold by Henry Griswold Sampson on June 6-7, 1882 for $14.50; sold by private treaty on Mar. 10, 1883 by Edward Frossard for $12.50 to Thomas Harrison Garrett,[90] who died June 7, 1888; to Alice Whitridge Garrett; Robert Garrett (on loan to Princeton University, 1904-1921); 1919 to John Work Garrett, who died 1942; Alice Warder Garrett, who died 1952; Johns Hopkins University, auctioned by by Bowers and Merena, Oct. 1-2, 1980, 1322, realized $5,250, probably to a collector on northern Long Island.

5) 3.0001 g (46.3 gr). Collection of Philippe-Édouard Legras, auctioned by C. van Peteghem, Paris, 11-15 Dec. 1882, 815, two coins in one lot, realized 59 francs ($11.33); Professor Charles E. Anthon, whose collection was auctioned by Bangs & Co., Oct. 20-22, 1884, 1272, realized $13; G. J. Bascom, whose collection was auctioned by Scott Stamp & Coin Company (Cataloguer: Lyman Haines Low), Feb. 27, 1888, 248, price realized unknown; in the collection of Charles Morris of Chicago, auctioned by S. H. & H. Chapman on Apr. 19-20, 1905, realized $42.50; sold to John Story Jenks, whose collection was auctioned by S. H. & H. Chapman on Dec. 7-17, 1921, realized $82.50, "bought by a dealer" (according to B. Max Mehl's note in the ten Eyck sale); Charles E. Clapp; T. James Clarke, whose estate was auctioned by New Netherlands Coin Company in New York, Nov. 24, 1956, where it realized $190; being sold to Eric P. Newman; John L. Roper II, whose collection was auctioned by Stack's, Dec. 8-9, 1983, realized $3,740; Anthony Terranova.

In the New Netherlands catalogue it is claimed that Clarke said that Clapp had paid $175 for this coin; but if Clapp did pay that,

he could not have bought it directly from the Jenks sale, because the priced catalogue in the ANS says the coin only obtained $82.50.

The identity of the Morris-Jenks-Clarke-Newman-Roper-Terranova coin with the Bascom coin is determined by a rubbing made by Lyman Haines Low, *Rubbings and Impressions*, p. 56, coin no. 1358 (a ms in the ANS Library). The pedigree thenceforth may be considered certain.

6) 2.4882 g (38.4 gr). Collection of Philippe-Édouard Legras, auctioned by C. van Peteghem, Paris, Dec. 11-15, 1882, 815, two coins in one lot, realized 59 francs ($11.33); William H. Starr, whose collection was auctioned by Charles Steigerwalt, Dec. 19-20, 1884, 1902, "obverse, fair, reverse very good," realized $8; auction by Scott Stamp & Coin Company (Daniel R. Kennedy) Dec. 12-13, 1894, "obverse good, reverse poor"; realized $1.60; collection of Georg F. Ulex of Hamburg, auctioned by Lyman Haines Low, July 8, 1902, 40, "obverse fair, reverse rather poor"; realized $3; Dr. Thomas Hall collection; bought with the rest of Hall's collection by Virgil Michael Brand, Sept. 7, 1909; 1926 to Brand estate (Brand numbers: 300011 and Hall Collection 64), graded 1932 by Burdette G. Johnson as "Fine"; 1934 to Armin W. Brand; consigned to Burdette G. Johnson Feb. 5, 1941; sold by May 1, 1942 for $75;[91] Robert R. Prann, auctioned by Abe Kosoff and Abner Kreisberg at the ANA convention, Aug. 26-27, 1947, 574, estimate $125, realized $90;[92] consignment of H. Gerald of New York City, auctioned by Stack's, Feb. 26, 1955, "possibly the finest known," "a choice Very Fine," realized $200; Herbert M. Oechsner, auctioned by Stack's, Sept. 8, 1988, realized $2200; second lowest in grade of examples known.

7) 3.56 g (54.94 gr). Heaviest example known; described by someone (probably Burdette G. Johnson) in the Brand inventories as "An extremely fine coin on an extremely thick planchet." Dr. Thomas Hall; bought with the rest of Hall's collection by Virgil Michael Brand, Sept. 7, 1909; 1926 to Brand estate; assigned number Hall collection 444; 1934 to Armin W. Brand; consigned to Burdette G. Johnson, Oct. 6, 1936; sold Feb. 1937 for $100;[93] Eric P. Newman.

8) 3.053 g. ANS 2, the pierced example: George M. Klein collection of Vicksburg, sold by Bangs, Woodward and Frossard, May 21-25, 1888, realized $6.50; auctioned again by Woodward, Sept. 3-5, 1888, allegedly bought for $20 by Charles Morris of Chicago; his collection auctioned by S. H. & H. Chapman on Apr. 19-20, 1905, realized $5.75; filled and plugged by someone between 1905 and

1952; Henry Clay Hines?[94] to Homer K. Downing; on his death, May 29, 1951, to David Bullowa, listed in his fixed price list of Oct. 1952, 17,296, at $135; sold to ANS; ANS 1952.159.1.

9) Auctioned with, although not forming part of, the Judice dos Santos collection, by Jacques Schulman, Amsterdam, Sept. 26, 1906, 6031, "très bon condition," price realized unknown; to Virgil Michael Brand, accessioned by him Nov. 1906 at $13.60 (34 guilders) and given number 35599; described by Burdette G. Johnson, 1932, as "Very Fine";[95] presumably assigned to Horace Brand when the Brand estate was split in 1934.

10) Part of Charles Podhaisky, New York, and R. Frentzel collection auctioned by Jacques Schulman, Amsterdam, Apr. 23, 1907, 16, price realized unknown; to Virgil Michael Brand, accessioned by him June 1907, at $8.80 (22 guilders), given number 38532; described by Burdette G. Johnson, 1932, as "Fine";[96] presumably assigned to Horace Brand when the Brand estate was split in 1934.

11) 2.334 g (36.02 gr). ANS 1: Julius L. Brown, whose collection was sold by his executor Governor Joseph M. Brown, auctioned by Samuel Hudson Chapman, May 30-31, 1911, 636, "Obv. corroded as usual. Rev. very good," realized $4; Colonel James W. Ellsworth; on his death to M. Knoedler & Co., bought from Knoedler as part of the Ellsworth estate, Mar. 3, 1923 by John W. Garrett, but because this duplicated his existing holdings and was in worse condition, Garrett gave the piece Nov. 26, 1923, to the ANS,[97] as part of its "Christmas cabinet"; ANS Accession number 1923.159.2.

Ellsworth exhibited at the ANS 1914 exhibit, but there was no New Yorke in America piece there; perhaps he did not own it in 1914, or perhaps he did not want to display a coin which is not in very fine condition. The most valuable coin that Ellsworth displayed in 1914 was a Brasher doubloon.

12) Ellis H. and Doris B. Robinson collection; donated by them, summer 1981, to the Rensselaer Polytechnique Institute, Cornell University, Russell Sage College, and Brown University, who owned it in common and had it auctioned by Stack's, Feb. 10, 1982, 59, realized $875.

This is a very close match of the Ellsworth-Garrett-ANS coin. They almost certainly share a common pedigree. They resemble each other in the spotting on the obverse, and also in the way the A and the M in AMERICA are struck off-flan. They are clearly very close

in terms of emission sequence.

13) Charles E. Clapp; George H. Clapp, Carnegie Museum of Natural History in Pittsburgh, stolen sometime in the late 1960s or early 1970s.

The pedigree of many of the coins that were in the Carnegie Museum of Natural History in Pittsburgh is difficult to determine, because of lack of records; but I have examined the boxes in which the coins were kept, and although the box for the New Yorke in America token was stolen with the coin, all the finer early American pieces came from George H. Clapp, who had earlier acquired them from his brother Charles E. Clapp.

14) 1.3478 g (20.8 gr). Lowest weight and lowest grade of all examples known to me: Henry L. Jewett collection, auctioned by Samuel Hudson Chapman, June 21-23, 1909, 381, "Good. Eroded," realized $7.25; collection of Commodore W. C. Eaton, U. S. N., auctioned by Henry Chapman, May 7-8, 1929, 3, weight given as 20 1/2 gr, eagle side "corroded but readable," Cupid side "very fine," price realized unknown; auctioned by Federal Coin Exchange, at the ANA convention of Aug. 21-24, 1957, 22, "About Good," realized $80; auctioned by Paramount International Coin Company at the ANA convention, July 19, 1974, 703, realized $825; Dana Linett, who consigned it to Kingswood Galleries (division of Bowers and Merena), Aug. 14, 1990, 6142, realized $3,470. ANACS has graded this coin VG-8.

15) Found in a lot of Civil War tokens in the 1950s.

16) Found in a lot of Civil War tokens in the 1950s.[98]

17) 3.039 g (46.9 gr). John J. Ford, Jr.: before Apr. 10, 1964[99] to Theodore L. Craige; circa 1971? to Richard Picker, sold by Stack's, Oct. 24, 1984, 97, where it realized $3,080; thence to a collector on southern Long Island.

My pedigree Craige-Picker is an educated guess. It could very well be wrong.

18) Auctioned by Stack's, May 2, 1968, 51, realized $400.

19) 2.4869 g (38.38 gr). Laird U. Park collection, auctioned by Stack's, May 26, 1976, realized $3,750; auctioned by Stack's, May 2, 1985, realized $2,420.

20) 3.1168 g (48.01 gr). Stack's, Mar. 17, 1987, realized $1,980; auctioned by Dana Linett, Newport Beach Coin Show, June 24, 1988, realized $4,125; auctioned by Bowers and Merena, Four Landmark Collections, Mar. 29, 1989, realized $3,025; to Tom Rinaldo.[100]

It was probably either this piece or no. 14 which was auctioned by Dana Linett at the ANA Midwinter auction "Slab Mania" of Mar. 2-3, 1990, where a New Yorke token was bid up to a price of $2,970. Unfortunately, the ANS does not have a copy of the "Slab Mania" auction catalogue.

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[2] Fisk P[arsons] Brewer, "The Earliest New York Token," *The Historical Magazine, and Notes and Queries concerning the Antiquities, History and Biography of America* 5 (October 1861), pp. 294-95; John Adams, "Original Manuscript of 'The Earliest New York Token' for Historical Magazine (Written May 1861)," *The Colonial Newsletter* 19 (1980), pp. 736-39.

[3] Hall had no reason to lie. Woodward might have given Hall a false pedigree, although in this case I think Woodward was telling the truth.

[4] Howard L. Adelson, *The American Numismatic Society 1858-1958* (New York, 1958), p. 27 and n. 25.

[5] *Obituary Record of the Graduates of Yale University Deceased from June, 1880, to June, 1890. Presented at the Annual Meetings of the Alumni, 1880-1890* (New Haven, 1890), pp. 580-81; *Catalogue of the Officers and Graduates of Yale University in New Haven, Connecticut 1701-1924* (New Haven, 1924), p. 185; Adelson (above, n. 4), p. 27.

[6] It was listed in the catalogue of the Yale Cabinet, as a copy, with F. P. Brewer as the donor. *Catalogue of the Cabinet of Coins Belonging to Yale College, Deposited in the College Library* (New Haven, 1863), p. 21.

[7] "This token came from the collection of Mr. Robert E. Bach, [*sic*] who died in England about 1834. His collection of coins was sent home after his death, remaining in the possession of the family for many years deposited in an iron box, in the Atlantic Bank, Brooklyn, N. Y. undisturbed until 1864, when they were purchased by Mr. W. Elliot [*sic*] Woodward. This piece was particularly prized by Mr. W. and was offered in his sale Mar. 1865 with a limit of $150. Not being sold it remained in Mr. Woodward's possession until purchased by myself during the spring of 1876 for AK.KK. [$30.00.] Mr. W. has the original catalogue written by Mr. Bach containing a description of the piece." Dr. Thomas Hall, "Notebook," ANS Library, Microfilm No. 10; Eric P. Newman has assisted me in interpreting this entry, not the least Hall's price code.

[8] Strobridge's remarks to lot 379, sale of February 23-26, 1874.

[9] Sylvester Sage Crosby, *The Early Coins of America* (Boston, 1875), p. 355; Walter Breen, *Complete Encyclopedia of U. S. and Colonial Coins* (New York, 1988), pp. 140-41, nos. 1247-49. Crosby estimated the number of Roman head Washingtons at six to eight; he knew the locations of four, namely in the cabinets of Appleton, Parmelee, Crosby himself, and Bushnell. Breen estimates the number at about a dozen. The ANS has one, acquired in 1951.

[10] Crosby (above, n. 9), p. 339; Eric P. Newman, *Coinage for Colonial Virginia*, ANSNNM 135 (New York, 1956), pp. 37-38; Breen, *Encyclopedia* (above, n. 9), pp. 30-31, no. 132. Crosby describes it as "extremely rare," only three known to him: they were in the cabinets of Henry S. Adams, Bushnell, and Parmelee. Breen gives the locations of six: Garrett sale, Smithsonian Institution, Boyd estate, Norweb estate, Eric P. Newman, Roper sale.

[11] Eric P. Newman and Kenneth E. Bresset, *The Fantastic 1804 Dollar* (Racine, 1962) pp. 71-74.

[12] "Specimens have turned up in groups of civil war tokens. Most probably, the issue was struck in or around the early 19th century." Don Taxay, *The 1971 Comprehensive Catalogue and Encyclopedia of United States Coins* (New York, 1971), p. 25. "Two brass strikings were found in Civil War token lots in the 1950s, which fact threw needless doubt on their age; almost anything of farthing size would have passed in the 1860s as a cent. Similar lots contained store cards datable to about 1834 and British farthing tokens of the 1820s." Breen, *Encyclopedia* (above, n. 9), p. 41. I have been able to find out nothing more about this discovery.

[13] "Most probably, the issue was struck in or around the early 19th century." Don Taxay, *The Comprehensive Catalogue and Encyclopedia of United States Coins* (New York and Omaha, 1970), p. 25; "The 'New Yorke in America' token, most probably intended for use as a jeton, is of 18th century or even 19th century origin." Robert D. Leonard, Jr., "Collecting U. S. Tokens: Challenges and Rewards" in *Perspectives in Numismatics. Studies Presented to the Chicago Coin Club*, Saul B. Needleman, ed. (Chicago, 1986), p. 182.

[14] I have switched the sides of what have hitherto been regarded as obverse and reverse. I have done this because the mute sides of English seventeenth century tokens are usually considered to be the obverse as well. It is interesting to note that Lyman Haines Low, one of the best numismatists the United States ever produced, also regarded the mute side as the obverse and the eagle side as the reverse.

[15] Michael Hodder, note to Bowers and Merena, Mar. 27-31, 1989, 5030. The broad arrow is the traditional British way of marking government property (including prison uniforms: American prisoners wear stripes, British prisoners broad arrows), and was used by the Royal Navy from the late seventeenth century. In the 1790s British military depots in England and also, probably, in British Guiana, counterstamped copper coins with the broad arrow. See Gregory G. Brunk, *Merchant Countermarks on World Coins* (Rockford, IL, 1989), pp. 25, 38, 49, 93, 113, 119, 134, nos. 50285, 50750-70, 51195, 52895, 53590-95, 53875-85, 54645-65; David Thompson, "War Office Created Tokens for Security," *World Coin News* (Iola, WI), Mar. 30, 1992, p. 34; for an example on a Washington Liberty and Security Penny (Baker 30), see Stack's, Mar. 15, 1975, 790. This was a much later development, resulting from the Napoleonic Wars, and looks nothing like the New Yorke in America piece.

[16] Eric P. Newman, *The Early Paper Money of America* (Iola, Wisconsin, 1990), p. 40.

[17] C[harles-] Wyllys Betts, *American Colonial History Illustrated by Contemporary Medals*, William T. R. Marvin and Lyman Haines Low, eds. (New York, 1894), pp. 299-300.

[18] The best reproduction is in Alan Kessler, *The Fugio Coppers. A Simple Method for Identifying Die Varieites with Rarity Listing and Price Guide* (Newtonville, MA, 1976), p. 17. There was one example in the Garrett sale, but the reproduction there is illegible.

[19] *CNL* 18 (1979), p. 687 (photograph of flag in the New Hampshire Historical Society).

[20] All references to English seventeenth century tokens are to the standard catalogue by William Boyne, *Trade Tokens Issued in the Seventeeth Century in England, Wales, and Ireland*, rev. edition by George C. Williamson, 2 vols. (London, 1889-91). The Boyne-Williamson numbering system goes by county; so the numbers here will be the county abbreviation, followed by a number.

[21] New Netherlands Sale June 15, 1967, 1058; Breen, *Encyclopedia* (above, n. 9), pp. 22-27.

[22] This last is a rare pattern which is not in the ANS collection; for examples of this pattern of 1677 and 1678, see F. Pridmore, *The Coins of the British Commonwealth of Nations to the End of the Reign of George VI 1952*. Part 4, *India*, vol. 1, *East India Company Presidency Series c1642-1835* (London, 1975), pp. 149-50, nos. 19, 20, 22, 24, 25.

[23] C. Wilson Peck, *English Copper, Tin and Bronze Coins in the British Museum 1558-1958*, 2nd ed. (London, 1964), pp. 107-61.

[24] Eric P. Newman, "The James II 1/24 Real for the American Plantations," *ANSMN* 11 (1964), pp. 319-32.

[25] R. H. Thompson, "Bristol Farthings, 1651-1670," in *SCBI* 38, *The Norweb Collection*, pt. 2 (London, 1988), p. xxviii.

[26] Henry Grunthal feels the coin was holed and later very skillfully plugged. Del Bland, on the other hand, believes that someone tried to hole the coin but did not quite succeed.

[27] One collector told me he thought he might have a pierced New Yorke token in his collection, but he has not been able to find it. If it does turn up, however, then presumably his piece is the Klein piece, and Bland's suggestion that it is an attempted holing which the ANS piece shows, and not a filled and plugged piece, would become more plausible.

[28] *The Victoria History of the County of Sussex*. vol. 4, *The Rape of Chichester* (London, 1953), pp. 75 and 78; James Dallaway, *A History of the Western Division of the County of Sussex. Including the Rapes of Chichester, Arundel, and Bramber, with the City and Diocese of Chichester* (London, 1815), vol. 2, pp. 288-90, esp. p. 288, n. a.

[29] John B. Pine, ed., *Seal and Flag of the City of New York. Authorized by the Committee Appointed by the Mayor to Commemorate the Two Hundred and Fiftieth Anniversary of the Installation of the First Mayor and Board of Aldermen of the City of New York on June 24, 1665, and the Adoption of the Official City Flag on June 24, 1915* (New York and London, 1915), pp. 59-63.

[30] John Romeyn Brodhead and E. B. O'Callaghan, *Documents Relative to the Colonial History of New-York; Procured in Holland, England and France* (Albany, 1855), vol. 4, pp. 368-71.

[31] "The Manuscript Section of the New York State Library can give no light on the date of the change from the ducal coronet to the imperial crown owing to the fact that all the seals which appeared on documents in the New York Colonial Manuscripts or other manuscripts in the collection were so melted by heat at the time of the fire in the Capitol in 1911 that even on documents which otherwise were fairly well preserved the impressions of the seals are entirely lost." E. Hagaman Hall, "History of the Seal and Flag," in Pine (above, n. 29), pp. 48-49.

[32] Although the photograph is not that good, it is still clear enough that Lovelace used his small seal on this occasion: Victor Hugo Paltsits, ed., *Minutes of the Executive Council of the Province of New York* (Albany, 1910), photograph facing p. 341.

[33] William Berry, *Encyclopoedia Heraldica, or Complete Dictionary of Heraldry* (London,[1828?-1838?]), vol. 2.

[34] *Fairbairn's Book of Crests of the Families of Great Britain and Ireland*, 4th ed. (London, 1905), p. 110. This lists an eagle surmounted on a ragulated fesse as a crest common to De Breteville, Dobbins, Dobins, Lovelace, and Roberts; but Roberts is a misprint. It is listed as crest 75.3, when it should be crest 75.2. None of these other families supplied governors of New York. If the eagle on a ragulated fesse refers to the arms of the governor, then it can only apply during the governorships of Francis or John Lovelace.

[35] It was applied in 1655, and is attached to British Library Additional Charters 13,667. W. de G. Birch, *Catalogue of Seals in the Department of Manuscripts in the British Museum* (London, 1894), vol. 3, no. 11,406.

[36] Marc Mappen, *The New York Times* Nov. 13, 1988, section 12, p. 13; Eric Pace, "Is This the Real Viscount Cornbury?" *The New York Times*, May 30, 1990, pp. B3, B6; Nicholas Jenkins, "Is She or Isn't He?" *Art News* (September, 1990), vol. 89, p. 17.

[37] John W. Raimo, ed., *Biographical Directory of American Colonial and Revolutionary Governors 1607-1789* (Westport, CT,), pp. 254-55.

[38] New York (Colony). Council. *Calendar of Council Minutes 1668-1783* (Harrison, NY, 1987), pp. 222, 230.

[39] Brodhead and O'Callaghan (above, n. 30), vol. 3, p. 189.

[40] Dean Chang, "Street Signs of the Times: $25 apiece" NY*Daily News*, October 31, 1991, p. 24. Because of the innuendo, the street sign for Lovelace Avenue is one of the most popular signs to steal, so the NYC Department of Transportation offers copies for $25 apiece.

[41] The claim continued to be pursued by Lady Charlotte Lovelace, his widow, in 1713. See Bowers and Merena Sale, No. 14, 1990, 5174.

[42] J. Hall Pleasants, "Francis Lovelace, Governor of New York, 1668-1673," *The New York Genealogical and Biographical Record. Devoted to the Interests of American Genealogy and Biography* vol. 51 (1920), pp. 175-88; on Francis's brothers Thomas Lovelace, see pp. 188-92, and Dudley Lovelace, pp. 192-94.

[43] Eric P. Newman, "Continental Currency and the Fugio Cent: Sources of Emblems and Mottoes," *The Numismatist* 1966, pp. 1587-98.

[44] Eduard Fiala, *Münzen und Medaillen der Welfischen Lande*, Part I, *Das neue Haus Lüneburg (Celle) zu Hannover* (Prague, 1912) p. 42; see nos. 1827-30 and 1974, the thaler referred to in the mint records.

[45] Also the innuendo in the English word "bush."

[46] Jay A. Levenson, Konrad Oberhuber, and Jacquelyn L. Sheehan, *Early Italian Engravings from the National Gallery of Art* (Washington, DC, 1973) p. 322. I owe this reference and the other information about palms as emblems to Louis Waldman.

[47] Fiala (above, n. 44), nos. 1827-30, 1974.

[48] There are many of this type: by Boyne-Williamson number they are Derbys.113 (Tideswell), Dorset.194 (Weymouth), Ess.153 (Colchester), Hants.184 and 200 (Southampton), Kent.499 (Sandwich), Kent.523 (Shurland), Lincs.56 (Crowland), Lincs.138-139 (Lincoln), Norfolk.27 (Diss), Norfolk.65 (Lynn Regis), Norfolk.225 (Norwich), Notts. 51 (Nottingham), Suffolk.158-159 (Ipswich), Warwicks.55 (Coventry), Westmoreland.5 (Kendal), Westmoreland.15 (Kirkby-Stephen), Worcs.44-45 (Evesham), Wales.44 (Kidwelly), Ireland.167-168 (Clonakilty), and Ireland.503 (Kerry).

[49] From paging through Boyne-Williamson, I came up with the following examples: from Cork, 174 (Clonmean), 198-199, 204, 210, 212, 213 (Cork), 544-6 (Kinsale); from County Kerry, 216 (Dingle); from County Antrim, 590 (Lisburn). The two town pieces from Ireland with the arms within a shield are Clonakilty and Kerry, i.e. located in Counties Cork and Kerry respectively.

[50] R. H. Thompson has recently argued that the seventeenth century tokens were struck in London, from dies made up in London, according to local orders. This is a seductive theory, but regional patterns, such as the mute obverses of the West Country, to my mind argue in favor of regional mints. Larger collections must be assembled, more photographs of more tokens must be published (such as those in the Norweb syllogae which Thompson has prepared), and punch studies must be done before this problem can be definitely solved. R. H. Thompson, "Central or Local Production of Seventeenth Century Tokens," *BNJ* 1989, pp. 198-211.

[51] Roger Bland is currently preparing a study of the Antiochene issues, and the clumsiness in calculating the space allotted to the type and the legend struck me as very similar to problems which the die cutters for tokens were often faced with. Of course, the problem was slightly different because the Romans generally did not use punches.

[52] Peter R. Christoph, ed., *New York Historical Manuscripts: English*, vol. 22, *Administrative Papers of Governors Richard Nicholls and Francis Lovelace, 1664-1673* (Baltimore, 1980), pp. 72, 79.

[53] Christoph (above, n. 52), pp. 79, 81.

[54] Christoph (above, n. 52), p. 99.

[55] Christoph (above, n. 52), pp. 175-80.

[56] Christoph (above, n. 52), p. 87.

[57] Christoph (above, n. 52), pp. 31, 187.

[58] Brodhead and O'Callaghan (above, n. 30), vol. 3, p. 234.

[59] Brodhead and O'Callaghan (above, n. 30), vol. 3, p. 230.

[60] Peck (above, n. 23), p. 105.

[61] Crosby (above, n. 9), pp. 11-18.

[62] Ivor Noel Hume, "The Very Caterpillers of This Kingdome: or, Penny Problems in the Private Sector, 1600-1660," in David G. Orr and Daniel G. Crozier, eds., *The Scope of Historical Archaeology. Essays in Honor of John L. Cotter* (Philadelphia, nd), pp. 233-50. I owe this reference to Philip Mossman and James Spilman.

[63] *The Loyal Impartial Mercury: or, News both Forreign and Domestick*, London, October 3-6, 1682, reproduced in *CNL* 16 (1977), p. 589; Edward R. Barnsley, "Importation of Halfpence & Farthings on the Unicorn," *CNL* 16 (1977), p. 609; Walter Breen, "What were the Coppers Brought Over by the Quakers in 1682?" *CNL* 16 (1977), p. 610.

[64] John L. Cotter, *Archeological Excavations at Jamestown, Colonial National Historical Park, and Jamestown National Historic Site, Virginia*, U.S. Department of the Interior, National Park Service, Archeological Research Series no. 4 (Washington, DC, 1958), pp. 60, 191 (pl. 89), 240 (artifact table 13); Hume (above, n. 62), p. 246.

[65] *CNL* 18 (1979), p. 685; *CNL* 19 (1980), p. 704.

[66] I owe this information to Henry Dittmer. I attributed the tokens by Boyne-Williamson numbers based on the color slide negatives at the ANS.

[67] George H. Clapp, Sewickley, PA, March 17, 1946, to Sidney P. Noe, ANS Archives.

[68] E[mmanuel] J[oseph] Attinelli, *Numisgraphics, or a List of Catalogues, in which occur Coins or Medals, which have been sold by Auction in the United States, also, a List of Catalogues or Price Lists of Coins, issued by Dealers, also, a List of various Publications of more or less Interest to Numismatologists, which have been published in the United States* (New York, 1876), pp. 21, 23.

[69] Newman (above, n. 16), p. 258. There are also Philadelphia Baches; one married Benjamin Franklin's daughter.

[70] *Obituary Record* (above, n. 5), pp. 396-397; Jonathan Edwards, *Catalogue of the Greek and Roman Coins in the Collection of Yale College* (New Haven, 1880) p. v; ANS accession records.

[71] Eric P. Newman, *The Secret of the Good Samaritan Shilling. Supplemented with Notes on Other Genuine and Counterfeit Massachusetts Silver Coins*, ANSNNM 142 (New York, 1959), p. 58; Don Taxay, *Counterfeit, Mis-struck, and Unofficial U.S. Coins: A Guide for the Detection of Cast and Struck Counterfeits, Electrotypes and Altered Coins* (New York, 1963) pp. 139-45.

[72] Édouard Frossard, "Discovery of A Colonial Coin Relating to New Netherlands," *Numisma* vol. 1, no. 6 (1877), pp. [4-7]; "Fabrication," *Numisma*, vol. 2, no. 2 (1878), pp. [4-5]; note by Frossard to lot 587 of his sale of January 9-10, 1891.

[73] This has been discussed in the pages of the *CNL* for December 1968 and March and September 1969. For an overview of some of the issues see Alan Kessler, *The Fugio Coppers: A Simple Method for Identifying Die Varieties with Rarity Listing and Price Guide* (Newtonville, MA, 1976), pp. 8-10; Breen, *Encyclopedia* (above, n. 9), pp. 147-48, 150-51.

[74] This section has been helped immensely by the two bibliographic works by John W. Adams: *United States Numismatic Literature*, vol. 1, *Nineteenth Century Auction Catalogs* (Mission Viejo, CA, 1982); and vol. 2, *Twentieth Century Auction Catalogs* (Crestline, CA, 1990). These provide a superb overview of auctions, dealers, and collectors in the United States of America. They list many appearances at auction of New Yorke tokens which I would otherwise have missed.

[75] This pedigree, back to 1834, is based on the microfilm of Dr. Hall's ledgers in the Library of the ANS, plus information supplied by Eric P. Newman, including interpretation of Hall's price code.

[76] Michael Hodder and Q. David Bowers, *The Norweb Collection: An American Legacy* (Wolfeboro, NH, 1987), pp. 185, 199.

[77] Legras was an extremely important early French collector. Born in Paris on March 9, 1803, he became a merchant and was fascinated by the numerous foreign

coins in circulation in Paris during the Napoleonic wars. He put together several major collections, including one of jetons and one of Chinese coins. He unfortunately had to melt his gold and silver collection during the revolution of 1848, and his collection of Paris jetons were destroyed when the Hôtel de Ville was blown up during the Paris Commune of 1871. But these losses did not discourage him, and he rebuilt his collections with renewed energy. Even when he was 70 years old, he spent 5 days going through 50,000 one centime pieces looking for mints and dates he did not have, and was rewarded by finding the rare one centime of 1870. He was one of the first collectors to devote much time to jetons, and had restrikes made of a number of pieces he did not own. He died on September 14, 1881. His collection was sold in 1882 in Paris in a series of five sales; it contained many important pieces, especially of early American and United States coins, and Frossard's purchases at the sale led to Frossard holding a sale in New York of pieces he had bought from the Legras collection. Georg Ulex, a Hamburg coin dealer who had an important collection of American coins, also bought coins at the Legras sale. C. van Peteghem, "M. P.-E. Legras," *RBN* 1882, pp. 188-94.

[78] Bluestone auctioned an electrotype six months later, so it is possible that this was not a genuine coin, but one of the lead electrotypes, which was later withdrawn before the auction or returned by the purchaser. Although William Herbert Sheldon always spoke very highly about Bluestone, George H. Clapp felt that he was inclined to overgrade. John W. Adams, (above, n. 74), vol. 2, pp. 114-24.

[79] Robert R. Prann was an Associate Member of the ANS from 1934 until the annual report published in Jan. 1956. He is not listed as a death, but resignation through death seems likely. He was haphazard in paying his dues, so was dropped from the rolls occasionally during the war. A consulting engineer, he lived in San Juan, Puerto Rico and collected colonials; he bought much from Burdette G. Johnson. (Information from the ANS archives.) Prann bought a Washington Roman head cent for $175 which was put on a ship during the Second World War and sunk. He also collected Latin American colonial coins. Abe Kosoff, *Abe Kosoff Remembers...50 years of Numismatic Reflections* (New York, 1981), pp. 22, 26, 47.

[80] This auction, which included the Prann collection, had fabulous pieces, but everything sold way below estimate; a disaster for the auctioneers. Kosoff's reminiscences and Bowers's biography of Kosoff do not even mention it, perhaps understandably.

[81] John J. Ford, "Foreword" to Q. David Bowers, *Adventures with Rare Coins* (Los Angeles, 1979), p. xi.

[82] On April 10, 1964, Craige exhibited both the brass and lead examples at the New York Numismatic club; NYNC minutes.

[83] Breen, *Encyclopedia* (above, n. 9), p. 41, no. 246.

[84] Born Feb. 24, 1790 at the castle of Heel, near Roermond. He served in the Dutch army, attaining the rank of colonel, and fought in most of the Napoleonic campaigns, including in Russia. In 1856 he was named a foreign associate of the Royal Belgium Numismatic Society. He died on July 21, 1863 at Nijmegen; his collection was sold by G. Theodore Bom at Amsterdam on Nov. 23, 1863 (the catalogue in the ANS library contains no identifiable lots of United States or early American coins; it consists chiefly of Dutch medals, coins, and jetons). Obituary in *RBN* 1864, p. 269.

[85] William P. Brown chiefly dealt in stamps and publications, but also, occasionally, in coins. He was active as late as 1895. Q. David Bowers, *The History of United States Coinage as Illustrated by the Garrett Collection* (Los Angeles, 1979), p. 46.

[86] Listed in the Newcomer inventory compiled by B. Max Mehl.

[87] Hodder and Bowers (above, n. 76), pp. 185, 199.

[88] *Numisma*, vol. 1, no. 6 (1877), p. [7].

[89] For Parsons as the owner of the colonial rarities ultimately sold to Garrett, Carl W. A. Carlson, "Frossard and Garrett: A Historical Study of the Relationship between a Semi-Professional Dealer and a Major Collector of the 1880s," *The Numismatist* 1978, pp. 472, 474; Bowers (above, n. 85), pp. 483-84.

[90] Carlson (above, n. 89), pp. 472, 474; Bowers (above, n. 85), p. 437.

[91] Brand Numismatic Archives, ANS Library.

[92] This auction, which included the Prann collection, had fabulous pieces, but everything sold way below estimate; a disaster for the auctioneers.

[93] Brand Numismatic Archives, ANS Library.

[94] This ownership before Downing was suggested by C. Douglas Smith.

[95] Brand Numismatic Archives, ANS Library.

[96] Brand Numismatic Archives, ANS Library.

[97] Carlson (above, n. 89), p. 474: "John Garrett in 1923 gave the duplicate from the Ellsworth Collection to the American Numismatic Society."

[98] "Specimens have turned up in groups of civil war tokens. Most probably, the issue was struck in or around the early 19th century." Don Taxay (above, n. 12), p. 25. "Two brass strikings were found in Civil War token lots in the 1950s, which fact threw needless doubt on their age; almost anything of farthing size would have passed in the 1860s as a cent." Breen, *Encyclopedia* (above, n. 9), p. 41. I have been able to find out nothing more about this discovery.

[99] On Apr. 10, 1964, Craige exhibited both the brass and lead examples at the New York Numismatic Club; NYNC minutes.

[100] Tom Rinaldo helped ascertain the pedigree of this coin.

# Unusual Printing Features on Early American Paper Money

*Eric P. Newman*

**Coinage of the Americas Conference**
**at the American Numismatic Society, New York**

**May 4, 1991**

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Early American printers were usually confronted with urgent requests by the authorities to prepare paper money as quickly as possible. For the period up to the American Revolution the required approval by British authorities of any authorization by an American assembly was often denied, delayed or conditioned, so that printing a much needed issue could not be undertaken until approval came. After the Revolutionary War began, every issue was an emergency. Thus printers and engravers were forced to expedite their work in producing money which had to be acceptable and protected. The printers and engraving artists had to plan and work together. There was always a choice as to whether the engravers would cut a complete copper plate or only cut elements in metal or wood for inserts or to cast inserts for typeset paper money. In the course of this work ingenuity and expediency were resorted to, coupled with short cuts, novelties and some errors. The printing of the money, whether from engraved plates or by letter press, had to be done on one side of a sheet at a time followed by drying time for the sheet whether it was printed on the back or not.

In the study of these paper money issues certain unusual printing features are evident and are categorized in the grouping which follows.[1] The illustrations are primarily parts of bills showing the specific features described and are placed as close to the descriptions as is practical.[2]

## Denominational Insignia

Denominations were customarily written in lettering or numbers or both. A decorative symbol representing the denomination was sometimes added.

As to shilling denominations, a common usage of a "crown" for 5 shillings and "crowns" for multiples thereof caused appropriate symbols to be included in bills printed by Benjamin Franklin (fig. 1). In Pennsylvania, probably beginning on April 10, 1731 (certainly by August 10, 1739), and in Delaware beginning on March 1, 1734, crown symbols in an appropriate number are evident on bills of five shillings or multiples thereof. Those crown symbols continued to be used into the American Revolution.

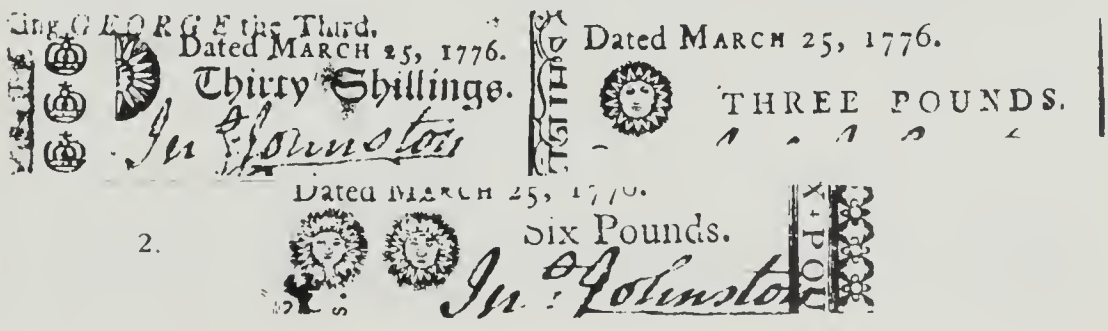
The New Jersey issue under the February 10, 1727/8 Act originally designated the sun and moon as symbols for specific denominations. Half a moon was 3d; one moon was 6d; two moons 12d; and 2 1/2 moons 15 pence. Half a sun was 30d; a full sun £3; and two suns £6. Whether Benjamin Franklin, who was working for Samuel Keimer in printing that issue, influenced the legislature to adopt such a system is not known. This system was impractical because the

1.

moon and the sun were the same circular shape and had to be distinguished by rays. Franklin sometimes used crown symbols on appropriate New Jersey issues through July 2, 1746 (fig. 2). The sun symbol was retained for 30s., £3, and £6. James Parker as printer for issues of May 15, 1755, and until the American Revolution, used crowns on the face and back and retained the sun symbol for the 30s, £3, and £6 denominations. Isaac Collins continued the practice.

In Connecticut for the redated issue of May 1713, an animal or the name of a color was engraved on the plate to tie into the denomination and these were to be printed in the color named. This was impractical and some later issues retained only the animal printed as part of the face plate.

In New York pound weight symbols were adopted beginning in 1737 for designation of "pounds" as a monetary denomination.

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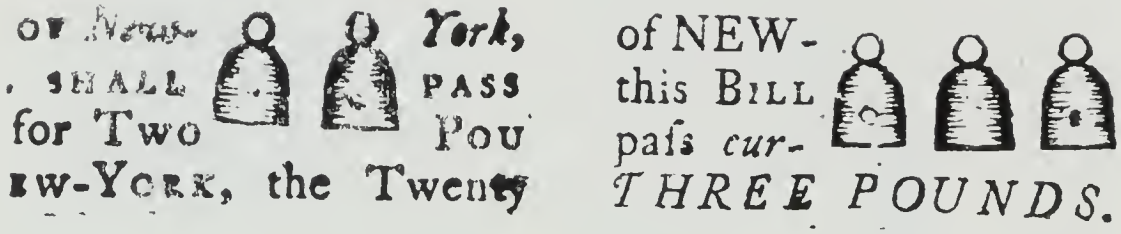


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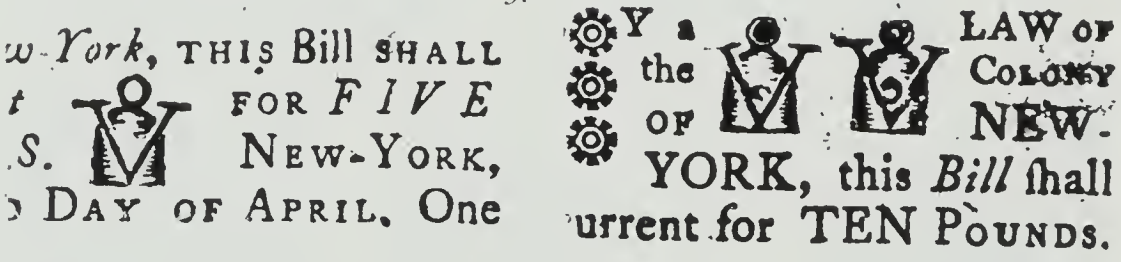


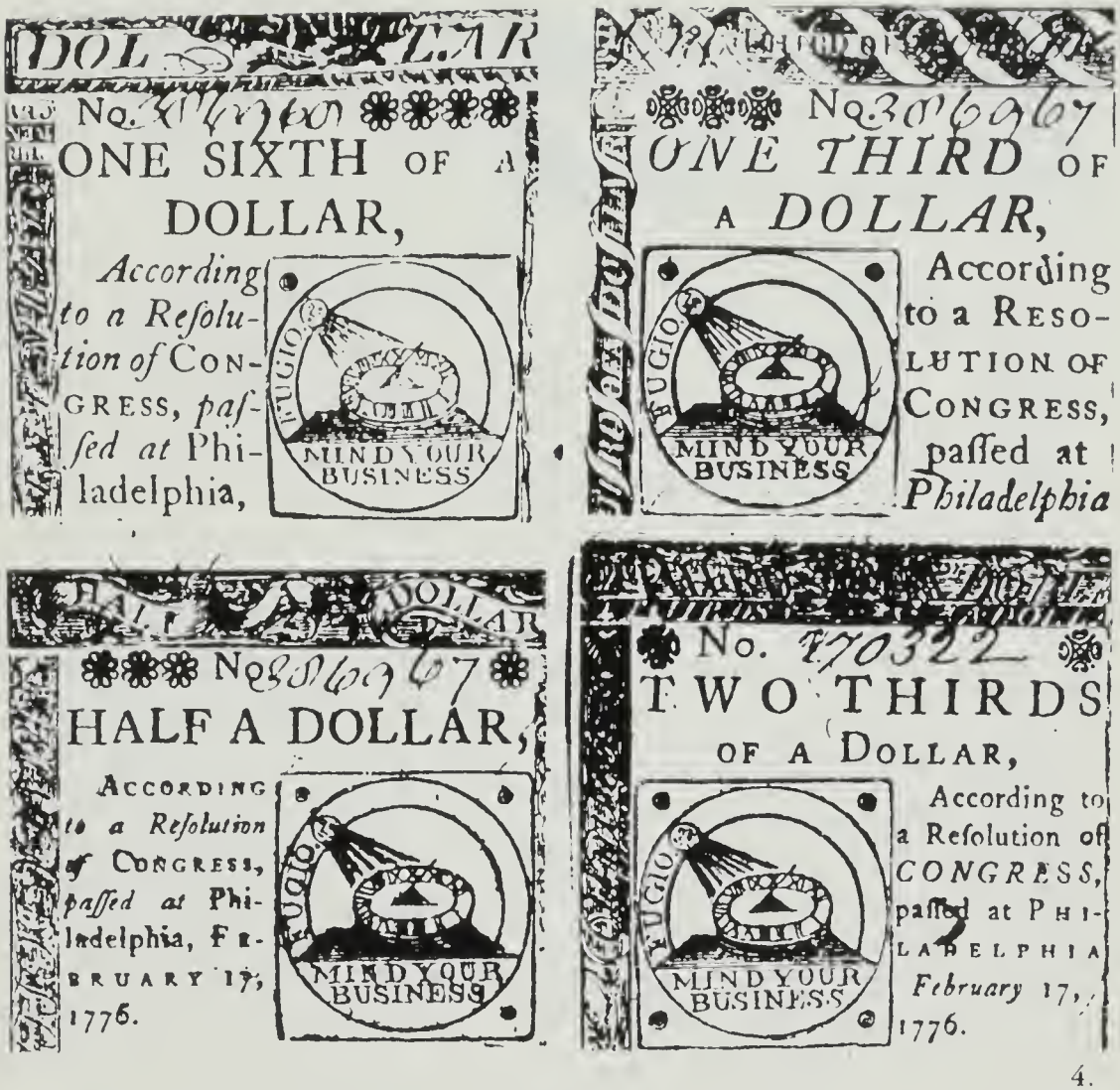

They were bell shaped and of the type used on scales. For denominations of £1, £2, and £3, the number of pound weights indicated the denomination. For denominations of £5 and £10 there was a V for 5 placed over the pound weight symbol to hold the number of needed symbols to a minimum (fig. 3). These insignia were inefficient as the distinction between a weight without a V over it and one with a V over it was difficult, particularly for the £2 and £10 both of which had two weight symbols side by side. Thus they were inadequate for accurate recognition of a denomination or as an alteration deterrent.

In some issues of bills the text on the face or on the back of a bill was sometimes arranged in a specially outlined shape for each denomination. In the Arms or seal on some issues the shape was different for each denomination. These denominational differences were in addition to the size and shape of the bill itself.

In the February 17, 1776 fractional issue of the Continental Congress, there are respectively one, two, three or four ornaments outside the circle of the face device, the number of ornaments increasing in the rising order of the four denominations (fig. 4). Yet the rosettes under the top border of the face vary in number and in placement and have no relationship to any denomination or its order in the issue.

## Drawn and Quartered

The early bills of the New England colonies were about 4 inches wide and 5 1/4 inches high. This size was too large to put conveniently into a purse or pocket without folding. Thus bills were often folded in half in each direction and then unfolded when spent,

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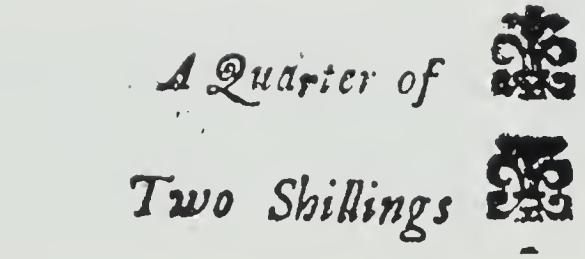
creating creases and splitting along the folds. It became convenient when the bill split apart to use a half or quarter section as change rather than paste or sew the parts together. Some people tore the bills deliberately to make change.

Massachusetts, in order to protect its citizens, passed a 1719/20 Act prohibiting the acceptance of sections of Connecticut bills of less than one-half. This in reality constituted an approval for bills to be torn in half for change. On June 15, 1722, Massachusetts appointed a committee to investigate the sectioning of bills. Connecticut in May 1726 prohibited the use of sectional Connecticut bills after May 1, 1727, but such laws did not stop the public from circulating sections of physically large size bills. The denomination of the torn sections could not always be easily ascertained. Connecticut by a May 1736 Act prohibited sectioning of bills of 5 shillings or greater, apparently being unconcerned about the sectioning of

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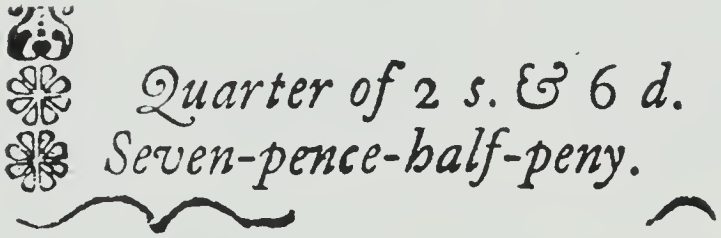



its outstanding 2 shilling, 2 shilling 6 pence, and 3 shilling bills.

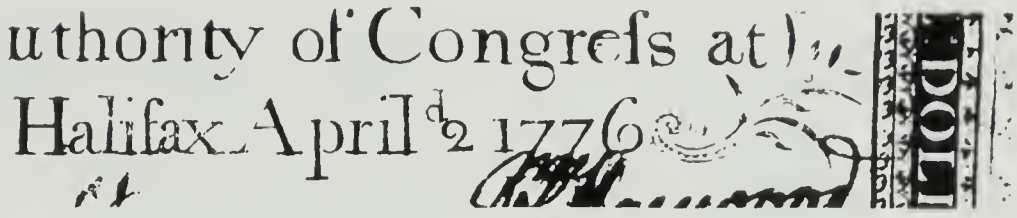
Connecticut found a way to solve the problem somewhat when it issued bills pursuant to its October 9, 1735 Act. On each quadrant of the letter press backs of its eight denominations from 2 shillings to 5 pounds of this redated July 10, 1733 issue there was printed "Quarter of 2 shillings," "Quarter of 3 shillings" or similar appropriate language on other denominations. It was apparently simple for the public to make the calculation. In the redated issues from July 10, 1733 up to the May 8, 1745, the quadrants on the back carried similar language (fig. 5). But then the calculation of the quadrant's value is printed on each of the four quadrants on the back on the only known piece as:

Quarter 2s. & 6d.
Seven-pence-half-peny

This assistance nevertheless required a person tendering half a bill to make a further calculation.

### Mirror Image Errors

For an engraver to cut an intaglio mold into which lead is to be poured to make a cast for a printing cut, it is not necessary to make a mirror image (reversed) or mirror image lettering. The cast becomes the mirror image and the printed sheet appears the same as the original mold. It is just the opposite for both an engraved printing plate or a wood block which must be cut in mirror image. An eighteenth century engraver had to be skilled in cutting either way. It is therefore understandable that an engraver may on occasion have been forgetful of the image transfer sequence he was to prepare and cut a design or letters in a reversed manner.

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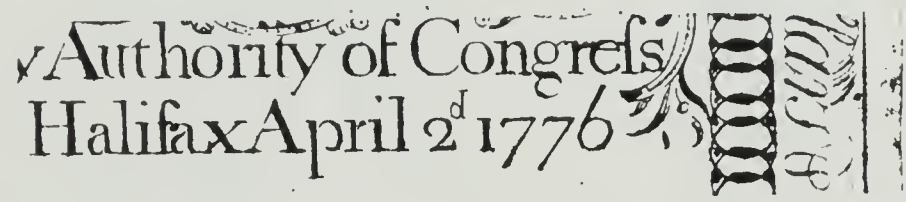
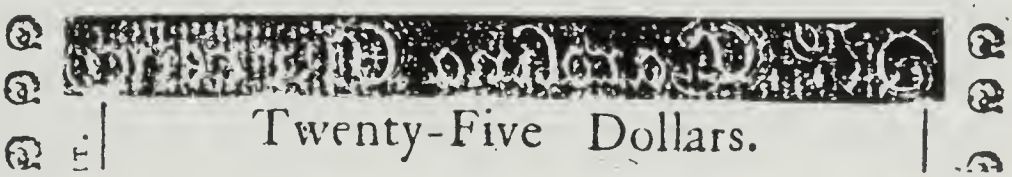



Examples of such errors are found on the early paper money. In the Continental Currency issues the seal on the $5 denomination contains the word ABSTINE which was cut into the seal mold. For the issues prior to July 17, 1776, the B is normal and well cut. It was determined to strengthen the motto in the seal and in so doing the vertical stroke on the B was cut in backward, being on the right instead of the left. The engraver thought he was cutting in mirror image. The result was two vertical sides to the B which makes it appear somewhat like an H. This error is evident in the July 22, 1776, and all subsequent issues of the $5 denomination.

In the North Carolina $5 Triton design, the date is intended to be April 2d, 1776, as on other denominations but appears as April d2, 1776 (fig. 6). The engraver, Gabriel Lewyn of Baltimore, forgot for the moment that he was supposed to be cutting from right to left and was supposed to place the number and the letter in reversed order, even though he did remember to cut each of them in the proper mirror image.

In the May 15, 1779 North Carolina issue, the top border cut contains the words "No Carolina Currency" in white script letters on

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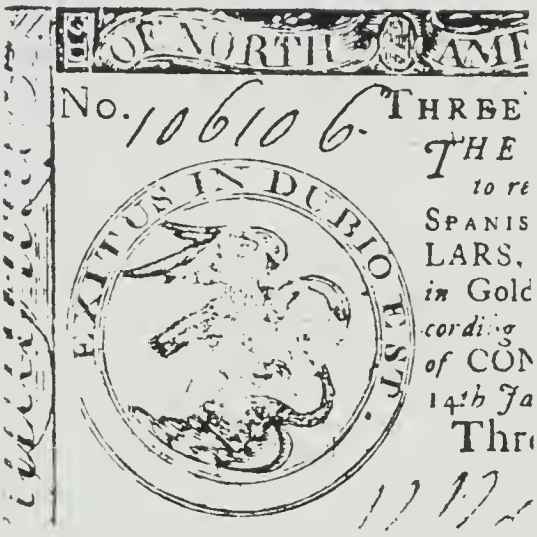


a black panel. On one variety of the printed $25 bill all letters appear in mirror image while in all other bills the lettering in the top border is correct (fig. 7). This was apparently due to the engraver being under the impression that he was cutting a mold from which a cast would be made rather than engraving a cut which was to be used directly in the printing form.

In all $3 Continental Currency bills up to January 20, 1779, the seal depicting a fight between an eagle and a crane originally had the birds facing left, but when the new and smaller copies of the seals were engraved for the 1779 issue the birds are facing right (fig. 8). This is the only one of the Continental Currency seals which was copied by cutting the seal as it appeared on prior bills instead of cutting it in mirror image.

### Backward S

The S in SHILL in the two side border columns on the face of the 10 shilling denominations of the October 25, 1755 Pennsylvania issue is in mirror image (fig. 9). This mistake of reversal was made by the engraver who cut the intaglio border mold from which both borders were cast. These erroneous side borders were used for printing the 10 shilling on 13 out of the 16 issues of the 10 shilling denomination for a period of about 21 years from 1755 through

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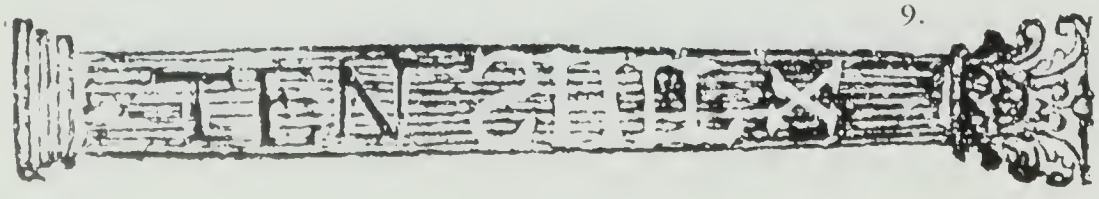


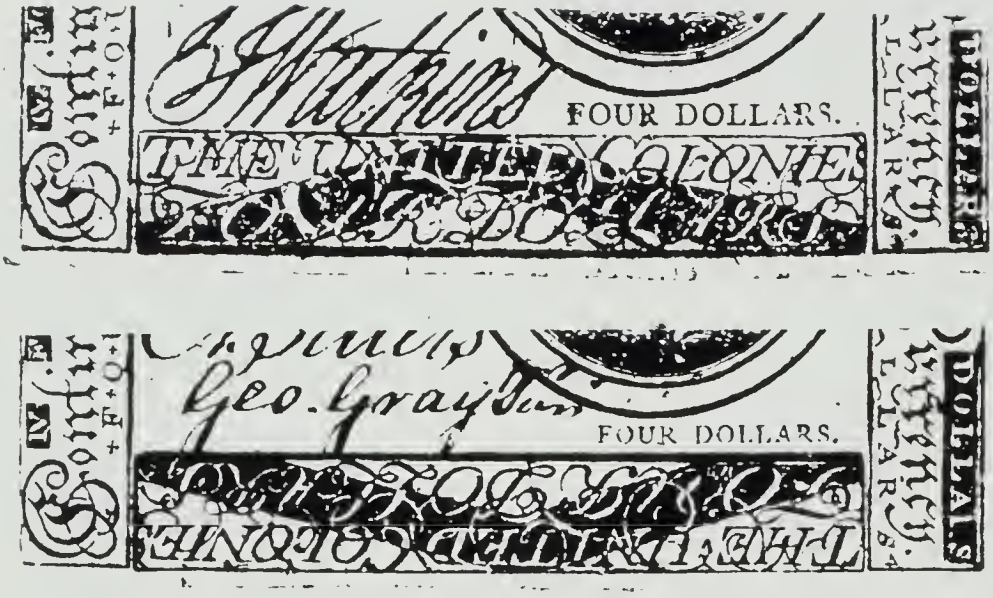
1776. The three issues on which no erroneous die border was used on the 10 shilling denomination were those of March 10, 1769 (no engraved side border), October 1, 1773 (new columnar side borders with ten shillings in script) and October 25, 1775 (same as October 1, 1773). In the July 20, 1775, December 8, 1775 and April 25, 1776, issues the 10 shilling denominations contained only one erroneous die border, the other being the script border previously used. The printing frame used to impress each sheet of bills containing erroneous side borders held the faces of two 10 shilling bills (Plate A and Plate B), thus putting four erroneous borders in use at one time through March 20, 1771, and two erroneous borders in use at one time in the three above named subsequent issues. Franklin and Hall as printer and its successor, Hall and Sellers, printed an aggregate of 171,400 bills containing this very obvious error. The erroneous border castings as they wore out or broke were probably replaced with new castings from the same mold, apparently because the error was not considered of sufficient importance to merit engraving a new mold. Perhaps Franklin concluded that it was a curiosity which people might notice and talk about. It certainly was no deterrent to counterfeiting.

### Upside Down

Instances of decorative cuts being placed in the printing form upside down are uncommon. In the 6 shilling bills of the Pennsylvania issue of March 20, 1773, the arms of Pennsylvania on Plate A are upside down as related to the text whereas the arms of Plate B are properly positioned. These arms are both cast from the same mold and a correction could have been made in the course of printing by loosening the printing frame and rotating that element to the proper position in that form. Hall and Sellers obviously did not notice the error.

In the Continental currency issues, the four face border designs contained engraved text in elaborate form. The choice made in positioning those borders on all integral denominations was for the base of their text to be located toward the inside of the note and the top of the text to be on the outside. This would enable some of the bill to be read right side up regardless in what position the face of the bill was held. While this put the bottom border upside down in relation to the central typeset text it conformed to the juxtaposition of the side borders.

All of the Continental Currency borders on the integral denominations are so placed except the bottom border of the $4 denomina-

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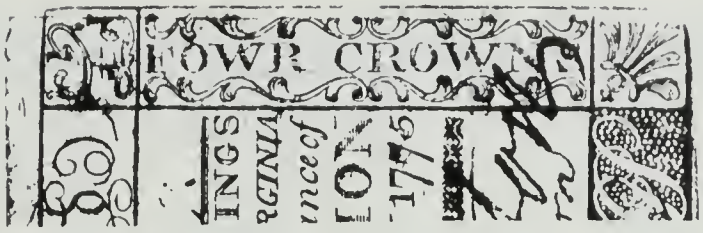
tion of the May 9, 1776 issue (fig. 10). It reads from the same direction as the central type set text and that border is therefore upside down. So far as is now known this was not corrected until the July 22, 1776 issue when the same border is rotated into its intended position.

## Spellbound

Some few accidental spelling errors in paper money are found more in the cast decorations or in the engraved plates than in the setting of the type. The type setters were naturally more skilled in spelling. When the denomination of the 7 shilling Connecticut issue of May 8, 1740 was spelled "SEAVEN" the engraver must have had his mind on the hereafter. This was not corrected in subsequent redatings of bills printed from that plate. When in Rhode Island the 6 pence bill of February 14, 1743/4 had a portion of its Latin motto spelled "SPEARMUS" instead of "SPERAMUS", the engraver must have been in a belligerent mood. This error, after continued use for that denomination in redated issues was finally corrected in the 1747/8 redating.

In the Virginia issue of July 17, 1775, the 1 shilling 3 pence bills were equivalent in stated value to the Spanish pistareen, but "PISTEREEN" was misspelled in the border. This border was used again in the May 6, 1776 Virginia issue for that denomination. The Virginia 20 shilling of both of these issues had its denominational equivalent in its right border as "FOWR CROWNS," the engraver obviously being influenced by the OW in CROWNS in making his misspelling (fig. 11). In the Virginia motto used in the arms of its

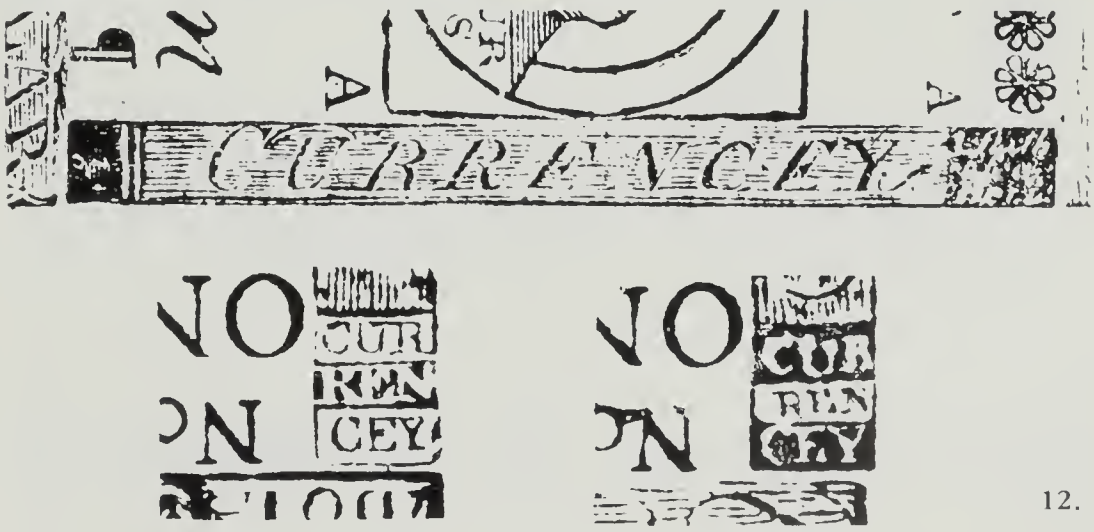


11.

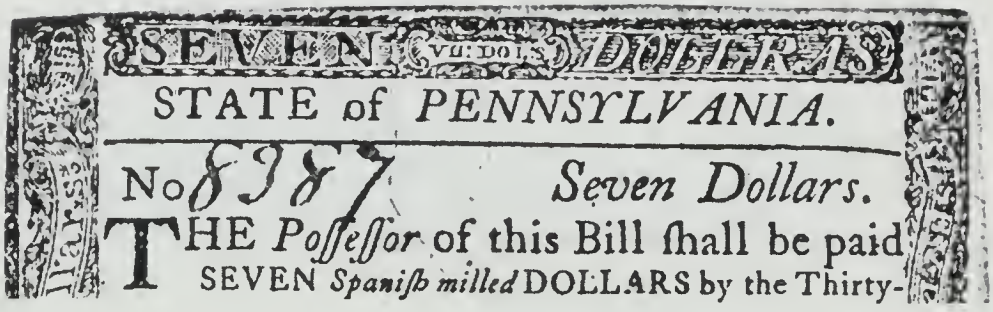
May 5, 1777, October 20, 1777 and first May 4, 1778 issues the word "TYRANNUS" was misspelled, but was corrected to "TYRANNIS" when new arms molds were made for the second May 4, 1778 issue.

A well known and pervasive spelling error occurred on the Continental Currency fractional dollar issue of February 17, 1776. Elisha Gallaudet engraved the mold from which the decorative border elements were cast. The misspelling of "CURRENCEY" appears twice on the face of an aggregate of 600,000 notes of $1/6th denomination (fig. 12). These $1/6 bills were printed from plates A, B, and C as part of every sheet of that fractional issue. The words "CONTINENTAL CURRENCY" were spelled correctly on all other bills of all issues both before, during and after February 17, 1776. The misspelling occurred in large slanting block letters at the top of the left border. At the top of the left border the "CEY" is black on a white background in plate A while it is white on a black background in plates B and C. No correction was made and no further $1/6 notes were issued.

This misspelling was compounded and repeated by Gallaudet in preparing dies for the 1776 Continental Currency coinage. That die sinker had first misspelled "CURENCY" (Obverse 1) and corrected it in making the next die (Obverse 2). His next misspelling was "CURRENCEY" (Obverse 4) repeating what he had done on the paper money. This was noticed and corrected (Obverse 5).



12.


SEVEN VII. DOL. DOLLRAS
STATE of PENNSYLVANIA.
No 8387 Seven Dollars.
THE Poſſeſſor of this Bill ſhall be paid
SEVEN Spaniſh milled DOLLARS by the Thirty-

13.

Hall and Sellers as official printers for the Continental Congress prepared the money for each state pursuant to the March 18, 1780 Act authorizing the exchange of $40 in Continental bills for $1 in 1780 issues. In the $7 bill for Pennsylvania the word DOLLRAS is engraved in the top border with a Cajun accent spelling (fig. 13). DOLLARS is correct in the same border in the issues emitted by other states participating in the exchange program.

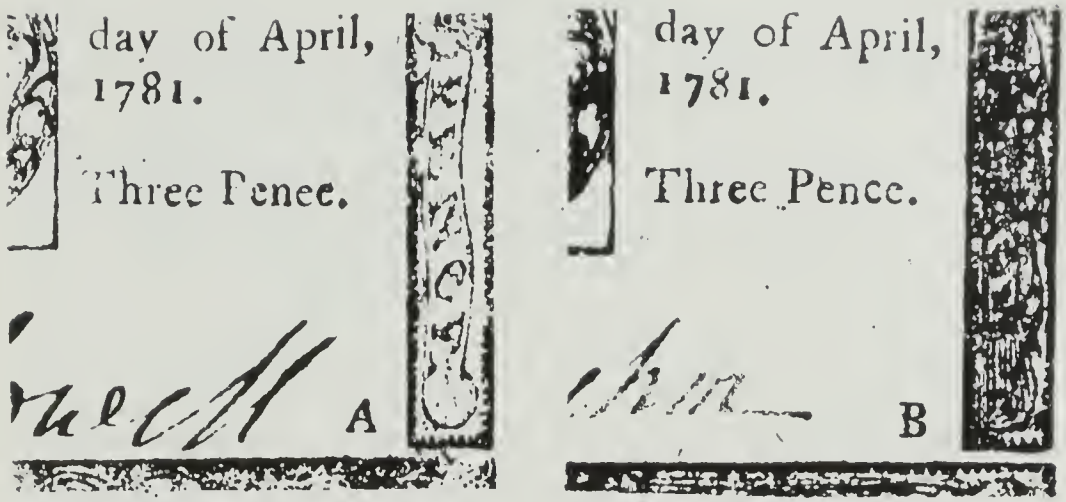
A punctuation error was made in the counterfeit warning in the New York bills from July 21, 1746 through February 16, 1756. "Its Death to counterfeit this Bill" omitted the apostrophe in the first word. This was not corrected until April 20, 1756, when the apostrophe was added for that and the next issue, but for the April 2, 1759 emission and thereafter a modification of "It's" into "'Tis" was made so that it read "'Tis Death to counterfeit this Bill."

In the New York £2 for the February 16, 1771 bill, the date was written as "February, 16, 1771" with an extra comma (fig. 14). This was noticed and promptly corrected for the balance of the printing run.

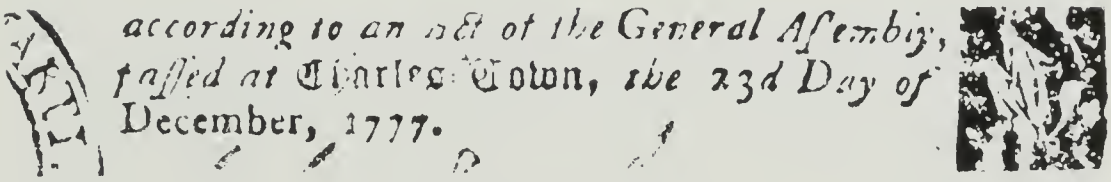
In the April 20, 1781 Pennsylvania issue, plate A of the 3d denomination is spelled with "Penee" instead of "Pence." On plate B the spelling is correct. If the colloquial pronunciation of "thrippenny" was customary the misspelling may be somewhat understood (fig. 15).

The South Carolina issue authorized on December 23, 1776, was issued in 1777 as printed on the backs, but the typesetter on the $2 and $4 denominations set the authorization date as December 23, 1777 (fig. 16). This was noticed during printing and before the issuance the misdating was changed in ink on those bills which had been printed and the correction made in the printing form for printing the balance of the issue.

14.



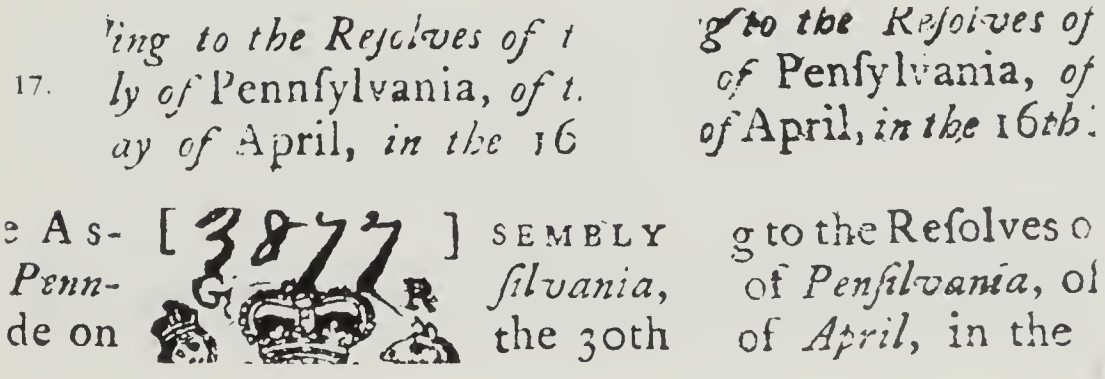

15.




16.

**A Spelling Teaser**

An obvious and major spelling curiosity in the printing of the bills of Pennsylvania is the spelling of the name of the Province with four different variations, Pennsylvania, Pennsilvania, Pensylvania and Pensilvania (fig. 17). That occurred in at least 20 issues over a period of at least 37 years. How early this happened is not now determinable because probative examples of many of the early Pennsylvania bills are not known. The August 10, 1739 issue contains the variation, Pensilvania, and was printed by Benjamin Franklin. Before Franklin began printing Pennsylvania bills in 1731 there is no misspelling known. Because Franklin would not have permitted such misspelling to go uncorrected for so long, the conclusion that the misspelling was deliberate must be assumed.



The systematic misspellings also indicate a voluntary plan of spelling variation. In the October 1, 1755 issue, at least the second group of four consecutive denominations have four different spellings, the first consecutive group of four possibly having them also, but some bills of that issue are unknown. The pattern in the many subsequent issues up to July 20, 1775, confirms four different spellings for four consecutive denominations and the spellings are customarily in the same order. During this period when two bills (plates A and B) or four bills (Plates A, B, C and D) of the same denomination were printed for any issue the spelling was identical on each bill of the same denomination. Likewise the same denomination of issues of various dates carries the same spelling previously used. Some minor irregularity emerged as new denominations were added, old denominations eliminated, or denominations were provided in other than groups of four.

In the issue of July 20, 1775, which was the first issue by Pennsylvania during the American Revolution, the spelling procedure was changed. There were four denominations, each having two plates. Each of the two plates of the same denomination curiously carried a different spelling. The same four original spelling variations were used in this issue, but the same spelling variation was used only on half of the bills of two of the denominations instead of only on bills of one denomination. The original pattern of variation was restored for the October 25, 1775 emission. When the December 8, 1775 issue appeared, however, both plates of each of the two lowest denominations had the correct spelling while both plates of the two higher denominations used the original variation pattern. By the April 25, 1776 issue, each of the three plates of both the 6d and 9d in the four low denomination group carry the identical misspelling PENSYLVANIA, breaking the original pattern; the next four highest denominations, each with two plates for each denomination, have a spelling pattern exactly like the July 20, 1775 issue. During the American Revolution the need for haste in printing money might have taken precedence over the original spelling variation system.

The misspelling or variation in spelling of Pennsylvania by the general public in the first three-quarters of the eighteenth century was not unusual. A logical counterfeiter would copy a genuine bill with a misspelling and would not correct it or change it. If however a counterfeiter noticed a misspelling on a bill, that might have discouraged counterfeiting that bill for fear that before the counterfeits could be prepared, corrected bills would have been issued and the error bills announced and withdrawn. Yet some of

the denominations had the correct spelling of Pennsylvania. It appears that counterfeiting protection was not the basic reason for the variations in spelling.

Possibly the protection sought was to deter alteration of the denomination of a bill by raising it to a higher amount. The denomination to which the bill might be raised would have a different spelling variation from the genuine bill used for alteration. Therefore altering denominations would require extra work to change the spelling or risk entrapment by not changing it. This would discourage the alterer as the work had to be done one bill at a time. Even if the general public would not check the spelling to determine if a bill were raised, certain merchants might check that feature in addition to the treasury officials. The fact that some low denomination bills had the same spelling of the Province name as certain high denomination bills would be offset by a difference in size or design. It must therefore be concluded that the variations in spelling were intended to be alteration deterrents which Franklin introduced into the printing of money. He must have enjoyed the wonderment he created among the good spellers and the confusion he created for potential denominational alterers. His nature printed backs on bills deterred counterfeiting of the bills he printed and his spelling confusion could have discouraged alteration of them. These ideas to prevent fraud must have been very effective in helping Franklin convince the authorities to give him, his firm and its successor the printing contracts for paper money.

## Eccentricities

A curious correction of the wording of the engraved plates for bills of the Connecticut issue dated May 8, 1740, resulted when the Crown changed the redemption status of the emission. The language of the complete plates ended with "in all payments and in the Treasury." It was ordered that the word "and" should be eliminated, restricting the legal tender meaning. The word "and" was hammered out of some plates, but in others the word "and" had horizontal lines scratched through it. As a result the use of those plates which were redated for several issues thereafter showed a word scratched out.

Words with a line through them are found in the border ornaments of all New York £5 and £10 bills of December 10, 1737 through May 10, 1746 issues. It is a puzzlement as to why this was done only on the two highest denominations. No help as a counterfeiting deterrent seems logical unless it was felt the

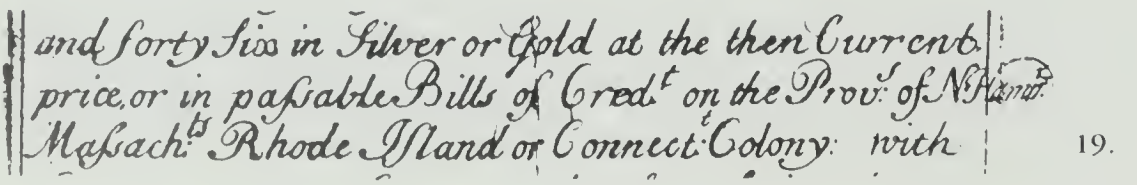
18.

counterfeiter would think the lines were only on a few of the bills due to an accident. As an alteration deterrent in raising bills it is of little value because a line could easily be inked in. If the border molds had been considered unsatisfactory and the portion to be redone was so defaced, there could have been a decision to use them nonetheless and not make new molds.

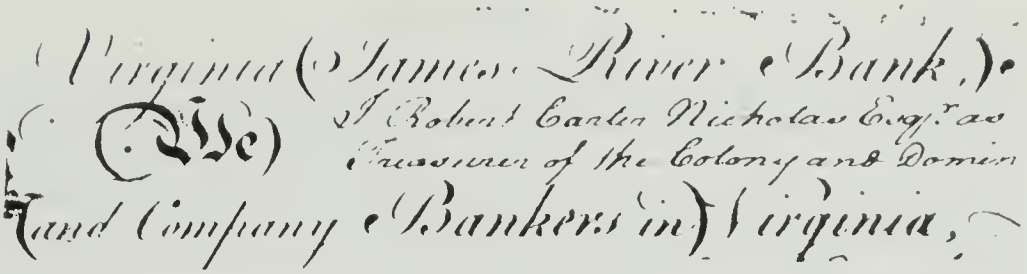
Some of the engravers of cuts for the paper currency put their names or initials on the cuts, such as David Rittenhouse, Thomas Coram, James Smither and Thomas Sparrow. It was customary for the printers to put their names on typeset currency. Jonas Green was very proud to have made nature prints for the Maryland paper money issue of 1767 and with a punch hammered out his initials I G into the nature print for the $4 denomination (fig. 18). Even though he and later his family as successors to his currency printing put their names as printers on all typeset bills before the American Revolution, Jonas Green's initials were conspicuously retained on that $4 Maryland nature print.

On the 10 shilling New Hampshire bill of 1734, the engraver carefully boxed in the area for the engraved text with an engraved border but at first omitted the "Hamp'r" of "N.Hamp'r" in the engraved text. This was corrected by adding "Hamp'r" through and outside the border (fig. 19).

Handwritten parentheses were used on a 1773 Virginia emergency issue to eliminate printed language on unissued currency forms. It had then been hoped that the operation of the James River Bank would be authorized by the crown and specially engraved forms for currency had been received in Virginia awaiting that approval before issuance. When Virginia needed an emergency money issue in 1773, there was no time to wait for normal currency prepara-


and forty Six in Silver or Gold at the then Current
price, or in passable Bills of Credt on the Prov: of N. Hamp:
Masach: Rhode Island or Connect: Colony: with

19.


Virginia (James River Bank.)
(We) Robert Carter Nicholas Esqr. &c
Treasurer of the Colony and Domin
and Company (Bankers in) Virginia,
20.

tion and it was realized that the available James River Bank forms could be quickly adapted for use by the Colony and Dominion of Virginia by adding some words to and eliminating some words from these forms. Adding words could be done by handwriting or overprinting but elimination by striking out words would have created an unacceptable appearance. The decision made was to write in the needed text and to bracket out with inconspicuous parentheses the portions not to be effective (fig. 20). The use of parentheses was expedient and barely recognized. The public was only interested in reading the denomination and not the text of the bill. Why imprinting the additions, including he date and denomination, were not undertaken in lieu of tedious extensive handwriting is difficult to fathom. Yet the September 1, 1775 emergency issue using the same leftover forms was filled in by hand but had no elimination of words by parentheses or strike outs. The original solution is apparently unique in numismatic history.

The North Carolina issue of April 2, 1776, although very quaint and charming, is incomprehensible as a practical money issue. Its engraved bills contained 56 differently designed vignettes ranging from eight varieties for one denomination down to one for a denomination. Each bill has a different vignette and there is no relationship between the vignettes and the denomination.

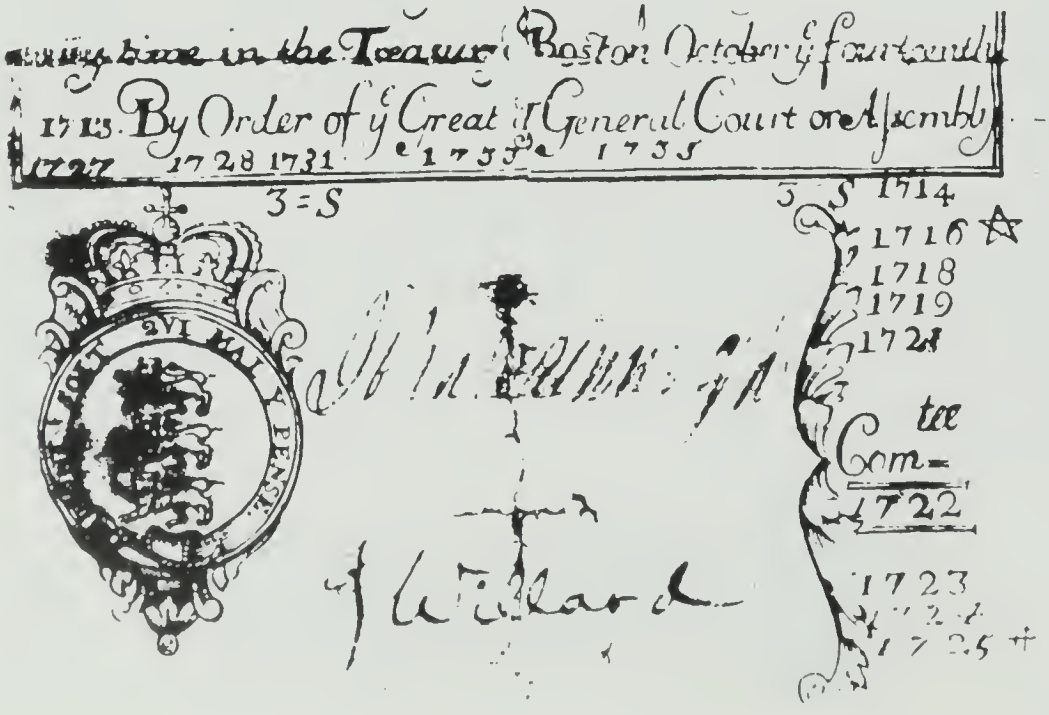
The vignettes include mammals, birds, fish, reptiles, insects, food, mythological beings, man-made objects and insignia. Uniformity of a denomination is desirable but Gabriel Lewyn, the Baltimore engraver, must have looked upon his assignment as an artistic challenge. His best known note is the $7.50 denomination with an intermediate state of the American flag combining a British Union with 13 stripes, a compromise position as to the outcome of the American Revolution (fig. 21).

21.

## Redating

When copper plates were engraved by artists for the printing of bills they usually remained in good condition after a print run. If portions became weak the plates usually could be retooled and thus strengthened. When a new issue was authorized and it was determined that the existing plates could be reused, the bills would have to be distinguished easily from a prior issue in circulation. Changing the back of the bill was not as satisfactory as changing the face. Changing the date on the copper plate was first done in 1708 from the Massachusetts issue of November 21, 1702. Adding a new date was simpler. This method of redating began in Massachusetts when the May 31, 1710 plates were redated 1711 by adding 1711 to a lower right side space without disturbing the original date. This practice continued in Massachusetts from time to time through 1740 with some bills having 18 redatings (fig. 22). When two issues occurred in the same year, an asterisk or other mark was added after the first used date for that year. Connecticut, New Hampshire and Rhode Island adopted similar practices of redating. In Rhode Island redating of the face plate was sometimes not undertaken further when there was no more room to add another date and then the date of the new issue would be included in the typeset back. Where old style years were in transition the redating conformed by using dates such as "Mar 14, 1744/5."

22.



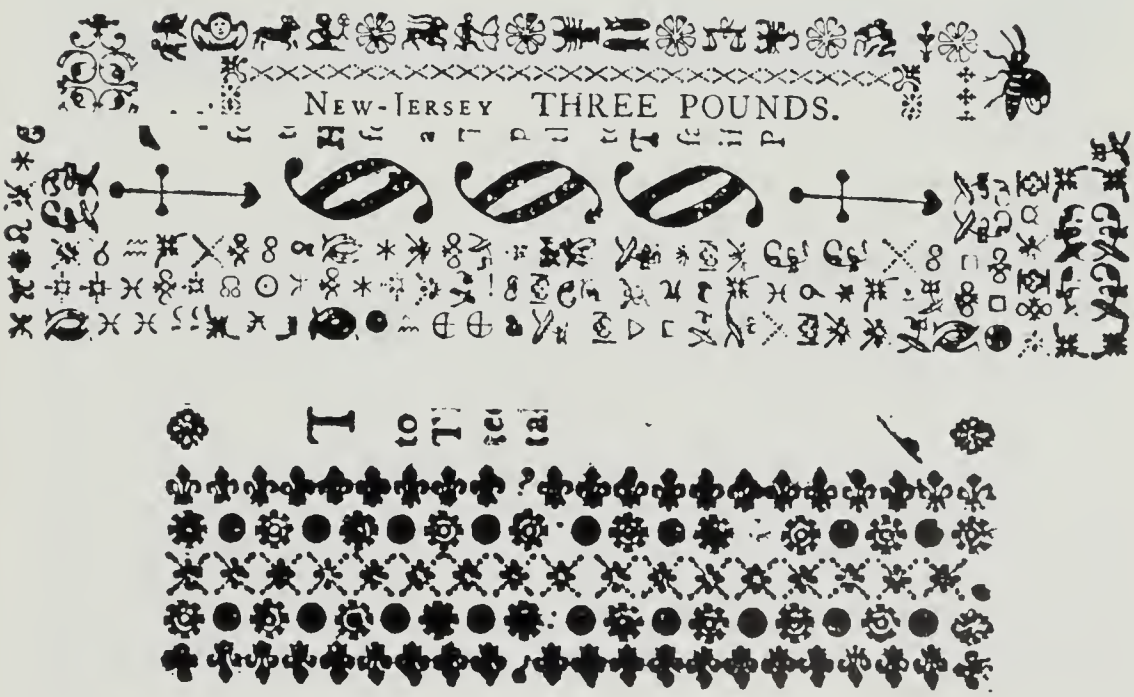
## Ornamentation

There was wide variety of foreign-made letter press ornaments available to American colonial printers for use in newspapers, books, pamphlets, advertising and notices. They were of various sizes to coordinate with various type sizes. They were used alone or combined for headings, separations, emphasis, borders and other uses to make printed matter more appealing. They came in geometrical, astronomical, linear, floral and other standard designs. They were distinct from scenes, vignettes, arms, insignia, and other special purpose cuts engraved by colonial artists. The standard ornaments were good counterfeiting deterrents because they could be well mixed and not all were readily obtainable.

Georgia issued most of its bills replete with rows of ornaments as borders and as decoration, and included letters and punctuation as part of such ornamentation. Georgia used question marks for the first time on paper money not realizing those issues would ironically soon be of questionable value. Sometimes the ornaments became loose in the printing form or fell out or broke. This usually required a change or replacement and gave rise to a different numismatic variety for any such bill.

A row of bees lies across the back of the March 25, 1776 New Jersey £3 denomination. South Carolina used available Hebrew letters as ornaments on some of its 1776 issues. Examples of some of these ornaments are given in fig. 23.

23.

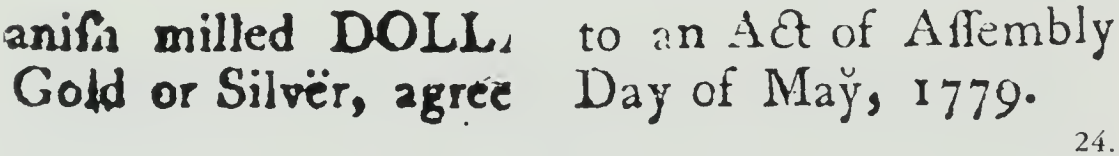


### The Not So Secret Marks

Maryland was the first colony to place secret marks on its bills to help identify counterfeits and alterations more easily. For the issues of 1767, 1770 and 1774 there were the same uniform oddities on each of the denominations. They include tiny, unnecessary, printed elements, incorrect or missing punctuation, and the letter N in mirror image. These were supposed to remain unnoticed because there were such obvious and highly visible errors, such as an undersized out of line letter in a word with a caret under it; as many as three different type fonts used in each line of text and often twelve different type fonts used in a single bill.

The Virginia typeset bills of July 14, 1780, October 16, 1780 (both series) and March 1, 1781, have a group of spelling errors in the higher denominations but with one exception none in the lower denominations. This is clear evidence of an alteration detection plan. BILL is misspelled QILL and DILL; DOLLARS is misspelled DOLLANDS, DOLLARAE, and DOLLAR8; HUNDRED appears as HUNDNED; POUNDS as POUNS; and FIVE as OIVE. The cleverest of these is DOLLAR8, the 8 having the same general appearance as an over-inked S.

North Carolina in its issue of May 15, 1779, used tiny letters, punctuation marks or accent marks over or under letters in the text such as the umlaut and the circumflex (fig. 24). In the known counterfeits of these bills the secret marks were diligently reproduced.




24.

### Seeing Red

Two color printing was discouraging to counterfeiters and was undertaken in some paper money issues as a deterrent. It was additional work for the printer and an additional burden for the counterfeiter. It began in America in the New England colonies when the protective indenture design on the back of the bills of Massachusetts Bay for November 2, 1702, was printed in red. By the issue of November 2, 1708, for which fine paper had been obtained from the Company of Stationers in London, there are large initials A R (Anna Regina) in ligature (half normal and half mirrored) printed in red on the face of the bills. This same design was used in issues of Connecticut and New Hampshire in 1709 and gave rise

to the name "red figured" bills. In New Hampshire in 1717 G R (Georgius Rex) had been placed on the back of lower denominations and C N H (Colony of New Hampshire) on the back of the upper denominations in similar fashion to the earlier use of initials.

Connecticut in 1713 printed the name of a color on bills and printed that name and an insignia in that color, the balance of the bill being printed in black ink. The committee signatures were to be written by hand with the same color ink as the portion of the bill printed in color. These procedures were totally impractical.

New Jersey began multi-color printing of its sage leaf bills with the July 2, 1746 issue by using a combination of some red and some black ink parts to distinguish the higher denominations of £3 and £6 from the lower denominations from 1 shilling to 30 shillings which were printed only in black ink. In the January 26, 1756 issue a further distinction was made by printing only the £6 note in red and black, changing the 30 shilling and £3 notes to all red and leaving the lower denominations in black. In the June 22, 1756 issue the faces of the 30 shilling, £3 and £6, being the three highest denominations, were printed in red and black with the back of the £6 note printed in green. In the April 12, 1757 issue only denominations of 15 shillings and above were issued and the faces were all printed in red except the £6 note which was printed in red and black on the face and a continuation of green on the back. By June 14, 1757, another color arrangement resulted in every bill being printed in black except that the face of the £6 was in red and black ink. In November 20, 1757 and May 1, 1758 issues all faces of bills were printed in red and black, thus adding 6 shilling bills to the two color category. For the October 20, 1758 issue, the 30 shilling and the £3 bills retained red and black faces but the £6 bill was printed in red and brown on the face and brown on the back. By this time there was no correlation between denomination and color except that bills below 6 shillings were always printed in black and bills of £6 were always in two colors. By the April 10, 1759 issue, the brown color ink was abandoned. In the April 12, 1760 issue, the bills of 6, 12 and 15 shillings went back to black ink only, but by the April 23, 1761 issue, red and black was resumed for 12 shillings and above. The April 8, 1762 issue changed the face of the £6 bill to red and blue which was continued for all the sage leaf issues through March 25, 1776, when the £3 was also printed in red and blue. That issue also brought red and black for the first time to the face of denominations as low as 1 shilling.

Most of the higher denomination New Jersey bills continued to circulate until the American Revolution in spite of their original

redemption and invalidity dates and are often found torn, dirty, split and patched from extensive use. They are a colorful group of notes nonetheless.

Although Pennsylvania bills had red and black printed text on their face and back by 1759, a remarkable printing skill was demonstrated with the October 1, 1773 issue. A portion of the primary face letter press text of the bill was printed in red in the shape of a symbol for the denomination and was closely surrounded by the balance of the text printed in black. Roman numbers X, XV and L were respectively printed in red on the denomination corresponding to those amounts and a large lower case l representing "libra" or "pound" was printed in red within the 20 shilling text. One decorative border on each denomination has its central portion printed in red while the balance of that border is in black. There is perfect registry of the two color wording in the text and in the two color portions of the border design in all bills examined. There is no visible evidence that a separate printing frame was used for each color.

In Georgia red and black ink combinations on bills began in 1765 and involved only certain words being printed in red ink. When the 1776 sterling issue was prepared, the two highest denominations had red and black ink on their faces to distinguish them from lower denominations printed only in black. When the dollar denominations appeared in 1776, the two color principle was restored and colored seals were added by a separate pressing in light blue, orange, green, red and blue-green. In the June 8, 1777 issue, the red printed portions at first permitted the "to" in the fourth line of the text of 1, 3, 4, 5 and 8 dollar denominations and the "in" in the fourth line of all integral dollar denominations to remain in black while the balance of the line was in red. This became such a problem in registry for the red impression that the text had to be reset so that the "to" was moved to line 3 and the entire fourth line was set in red rather than only most of it.

The final issue of Continental Currency of January 14, 1779, was printed in red and black on the face and back. In addition to some borders, an interior portion of the emblem on both face and back was printed in red. There is a very thin white margin around the red portions indicating that they were apparently cut out and removed from the basic frame for black printing and were separated or offset for red printing. This ability to register the sheet for the second printing in a separate printing frame with parts of the devices by the simple use of two projecting nails to put the sheet in an identical position was a masterpiece of printing achievement.

## Nature Printing

Examples of Benjamin Franklin's nature printing invention are found on paper money issues of New Jersey, Pennsylvania, Delaware, Maryland and the Continental Congress. This 1737 invention of Benjamin Franklin consisted of a plaster mold from an actual leaf. A lead cast for printing was made from the plaster mold and was combined with set type in the printing form.[3]

## The Printer's Puzzle

There was often a problem in each issue as to the quantity of each denomination to be authorized as part of the monetary total. The number to be printed of the more needed denominations was far different than the number of less needed denominations. After the monetary total of an issue was determined the printing problems also had to be faced. The sheets of paper for printing bills usually would hold four to sixteen notes depending primarily on the size of the bills. Sometimes an Assembly in setting quantities of each denomination would ignore the printer's problem. If more of the lower denominations were needed than higher denominations this often could be arranged by putting one group on one printing plate or form and the other group on another, and then making a different number of pressings from each. Another solution was to have a combination of denominations on one printing plate with only one of each less needed denomination and more than one of each more needed denomination. This practice could produce different amounts of each denomination from a specific number of sheets of paper. A full sheet had to be printed with each pressing or the waste of paper and labor would be substantial.

In letter press printing of bills one side of a bill was customarily assembled separately from type, ornaments and insignia. A group of such bills was locked into a printing frame which was slightly smaller than the size of the paper sheet. The backs were blank. If printing two sides of a bill was desired there had to be two pressings to complete a sheet of the bills. If the forms for the faces and their respective backs were both placed facing upward at the opposite sides of the same frame then after one side was printed and dried the sheet could be properly rotated and replaced on the same frame for printing the other side, thereby completing both sides of all bills in the frame.

To satisfy situations where printing from any frame would not result in the required number of each denomination, a substitution of one or more additional bill forms could be resorted to. In the

first Continental Congress issue of the May 10, 1775 session, the authorization of 49,000 each of eight denominations ($1 through $8) on June 22-23, 1775, was a properly planned arrangement for eight faces and eight backs in the frame, but on July 25, 1775, an additional 33,333 bills of $30 denomination were added. Since there was no more room in the frame to solve the problem, a game of musical chairs developed. Pressings of the eight faces and eight backs of the original denominations would have to be done 19,824 times, producing two bills of each denomination for each two pressings. Then the $30 bill form was substituted for the $1 denomination for 4,168 pressings; and similarly for each of the remaining denominations. This produced 33,344 of the $30 denomination and 29,176 for each of the other eight denominations. Adding the 29,176 pressings to the 19,824 initial run produced 49,000 of each of the eight lowest denominations. Therefore the total requirements for all denominations would be produced with an aggregate of 53,168 (19,824 plus 33,344) pressings. This efficient procedure did not involve the $20 denomination which was of a different size and separately printed on each side, one bill at a time, on marbleized paper obtained from Benjamin Franklin.

Another very flexible method of printing different quantities of various denominations was from time to time to change the denomination in an existing printing form by only resetting the denominational text. In this way denominational needs could be quickly and simply met. This procedure was used in Georgia during the American Revolution. The design and layout of ornaments on the borders of Georgia bills were varied and extensive. The text was short and direct. Whenever one or more denominations were needed the few letters designating the existing denomination would be changed and the border ornaments remained unchanged. Thus the same border ornaments are found in several denominations of the same issue and sometimes in those of different issues. There was little precaution against counterfeiting or alteration using this methodology but Georgia relied on two color printing and colored seals to protect its issues.

The skills, the endurance, the problems and the accomplishments of the colonial money printers and engravers make one appreciate not only Benjamin Franklin's genius as applied to that field but the amazing ability of many artisans and artists to furnish the colonial public with practical, beautiful and fascinating paper money.

[1] In the preparation of this study I wish to express my appreciation for the assistance and cooperation of Thomas Serfass of St. Louis.

[2] For the full image of the bill in many instances or for further information on any issue, reference is made to the author's *The Early Paper Money of America*, 3rd ed. (Racine, 1990).

[3] The development and extensive use of this anti-counterfeiting device has been previously detailed in the author's "Nature Printing on Colonial and Continental Currency," *The Numismatist* 1964, pp. 147-54, 299-305, 457-65, 613-23.

# Pennsylvania's Currency Signers 1723-1785

*Joseph R. Lasser*

**Coinage of the Americas Conference at the American Numismatic Society, New York**

**May 4, 1991**

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The late seventeenth and eighteenth century paper money of what is now the United States not only provides a provocative field for numismatists primarily interested in specimens for styles, varieties, conditions, dates, etc., these notes also open wide research vistas for collectors exploring the politics, commerce and social environment of our nation's early years.

All American Colonial and State notes were signed and numbered by hand. In some instances they were authorized to pay for the costs of military campaigns. At other times they were emitted to fund specific projects including lighthouses, jails, workhouses, etc. Some were issued against asset backed loan banks or anticipated tax receipts. Some were simply to provide a supply of currency for daily use and, on occasion, others were to replace preceding counterfeited issues or torn or worn bills.

Pennsylvania was late among the 13 colonies to authorize currency. It was the ninth to do so, starting with an issue on April 2, 1723, to relieve a shortage of circulating money for trade and general business in the Province.[1] Backed primarily by physical assets, the issue was redeemable in eight yearly payments. A second issue followed January 17, 1723/4—and thereafter 36 more authorizations were approved (see Table 1).

The evolution of the Colony and the major factors contributing to its development are readily discernible in the signers of its Colonial and State currency. The Colony's Quaker proprietorship birth is reflected in its initial paper money issues; the blossoming of

**Table 1**

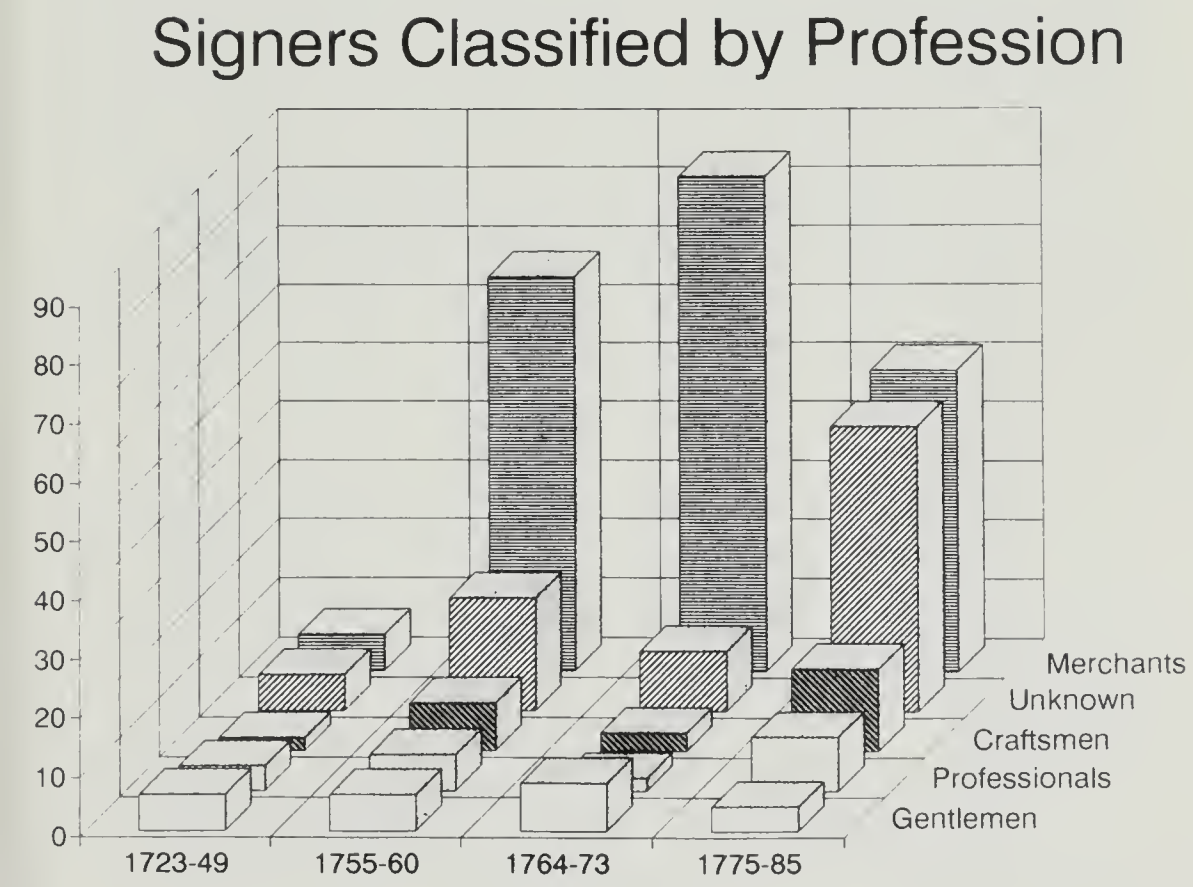
THE FOUR PERIODS OF PENNSYLVANIA CURRENCY ISSUES

| *1723-49* | *1755-60* | *1764-73* | *1775-85* |
|---|---|---|---|
| Apr. 2, 1723 | Oct. 1, 1755 | June 18, 1764 | Mar. 25, 1775 |
| Jan. 17, 1723/4 | Jan. 1, 1756 | June 15, 1767 | Apr. 10, 1775 |
| Mar. 25, 1726 | Oct. 1, 1756 | Mar. 1, 1769 | July 20, 1775 |
| Sept. 15, 1729 | Mar. 10, 1757 | Mar. 10, 1769 | Oct. 25, 1775 |
| Apr. 10, 1731 | July 1, 1757 | Mar. 20, 1771 | Dec. 8, 1775 |
| Aug. 10, 1731 | May 20, 1758 | Apr. 3, 1772 | Apr. 25, 1776 |
| Aug. 1, 1744 | Apr. 25, 1759 | Mar. 20, 1773 | Apr. 10, 1777 |
| Aug. 1, 1746 | June 21, 1759 | Oct. 1, 1773 | Apr. 29, 1780 |
| May 16, 1749 | May 1, 1760 | | June 1, 1780 |
| | | | Apr. 20, 1781 |
| | | | Mar. 21, 1783 Act |
| | | | Mar. 16, 1785 Act |

**Table 2**

SIGNERS OF PENNSYLVANIA CURRENCY, 1723-85

| *Classified by Occupation* | *Number* | *Percent* |
|---|---|---|
| Merchants & Businessmen | 181 | 58.8% |
| Craftsmen & Builders | 18 | 5.8% |
| Gentlemen & Landowners | 14 | 4.5% |
| Professionals | 23 | 7.5% |
| Unidentified | 72 | 23.4% |
| TOTAL | 308 | 100.0% |



Philadelphia as a major North American trade center led by aggressive Quaker merchants is seen in the second set of authorizations and the post French and Indian War transition from a comfortable English colonial status to a tense pre-Revolutionary posture characterizes the third series of emissions. The sweep to war and independence dominates the final group.

The signers of Colonial paper money were quite different from the bank officers and public officials that we are accustomed to seeing on later bank and government notes. As a whole, Pennsylvania colonial currency signers were prominent members of the community, especially the early government officers, merchants and industrialists. The Colony's landed gentry, proprietary officials, builders and craftsmen also are represented, and the radical Patriot mechanics and shopkeepers are very evident in the Revolutionary and post-Revolutionary issues (see Table 2).

Basically, the list of signers is a catalogue of many of the active political, economic and public leaders of early Pennsylvania, men who enabled the colony to grow from the sixth largest in 1701 to the largest in 1775 and who stimulated Philadelphia's rise to the largest city in North America by 1760. Most were Philadelphians and, although the research is not yet complete, substantially more than a majority were members of the Colonial assembly and/or State legislature.

As a group, the signers were younger than commonly might be imagined. Men in their twenties to forties account for a sizeable fraction of the total. Quakers and related sects, of course, predominate, stemming from William Penn's proprietorship and his early and successful efforts at proselytization and colonization. Anglicans comprise a small but important elite group of signers. In part, their

**Table 3**

TOTAL SIGNERS EACH SIGNING PERIOD[a]

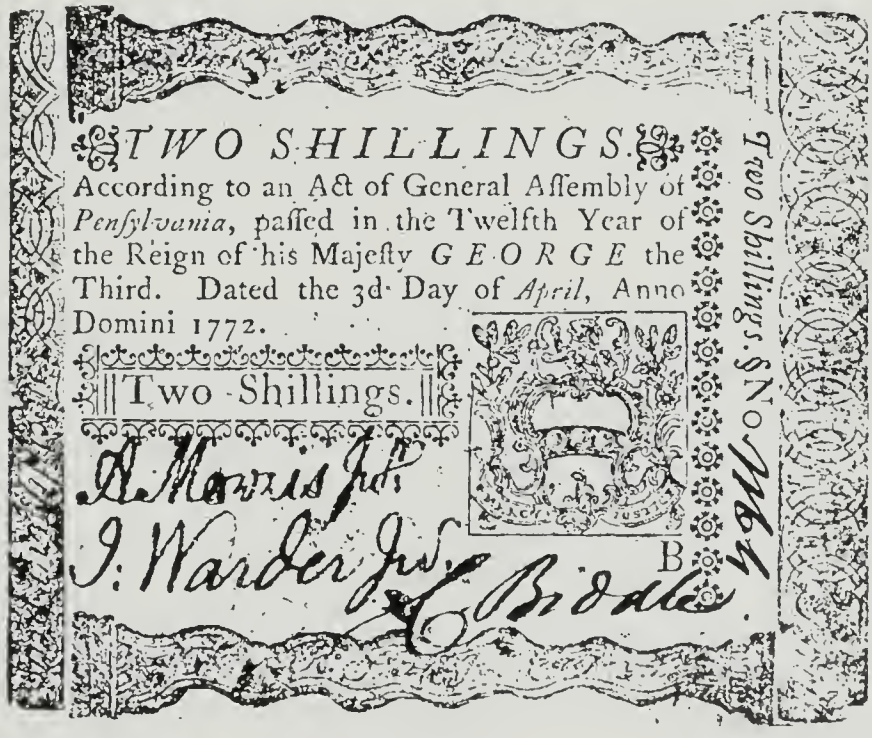
| *Occupation* | *1723-49* | *1755-60* | *1764-73* | *1775-85* |
|---|---|---|---|---|
| Merchants & Businessmen | 6 | 67 | 84 | 51 |
| Craftsmen & Builders | 2 | 8 | 3 | 14 |
| Gentlemen & Landowners | 6 | 6 | 8 | 4 |
| Professionals | 4 | 6 | 2 | 9 |
| Unidentified | 6 | 19 | 10 | 48 |
| TOTAL | 24 | 106 | 107 | 126 |

[a] Some signers were active in more than one period.

presence is a reflection of the conversion of William's son and successor, Thomas Penn, to the Church of England, and Presbyterians represent a sizeable portion of the remaining, especially in the latter days of the colony.

Overall, it appears that 308 men signed Pennsylvania currency from 1723 to 1785 (Table 3). The phrase "it appears" is necessary because of the many inconsistencies in eighteenth century handwritten and printed records. Identical names appear frequently. Sons or nephews dropped the suffix "Jr." when an elder relative died. More than one branch of a family gave ancestral first names to children, with the result that exactly the same names were carried by more than one person of the same generation. At the time that Major Anthony Morris, Jr. signed the April 3, 1772 Pennsylvania issue (fig. 1), there were three living Anthony Morris, Jrs. and three deceased earlier Anthony Morris, Jrs. Adding further to the identification tangle is the variance in names presented in printed records compared with actual signatures. For example, John Reynell, signer of the June 15, 1767 notes, is listed as John Reynall in the Pennsylvania Record Book of Laws. And the ultimate problem is illustrated by John Davidson who signed the April 10, 1777 issue both as John Davidson and John Davison.

Despite the blemishes, several valid conclusions can be drawn from available statistical data. Almost 59% of Pennsylvania's currency signers are known to have been merchants and businessmen.


TWO SHILLINGS.
According to an Act of General Aſſembly of Penſylvania, paſſed in the Twelfth Year of the Reign of his Majeſty GEORGE the Third. Dated the 3d Day of April, Anno Domini 1772.
Two Shillings.
Two Shillings.
B

1.

At first blush, this might seem surprising, but, upon review and analysis, it is logical and valid. In 1700, Philadelphia had a population of 5,000 and the Colony 15,000. By 1775, the totals were 35,000 and 300,000, but the number of relatively sophisticated and potentially active citizens in economic, political and civic terms was much more limited. Benjamin Franklin's papers at the American Philosophical Society indicate that about 2,000 people voted in the city of Philadelphia in 1765, which approximated 50% of the adult white males in a community that had an aggregate population in the neighborhood of 25,000. With only a small reservoir of competent people to draw upon, it is reasonable to assume that many merchants and businessmen were politically active and most probably wore several hats in promoting and serving their own and the general community's interests.

Other well educated and prosperous segments of Pennsylvania society accounted for a substantial majority of the remaining non-merchant paper money signers until the Revolution, after which a younger radical Patriot group emerged as a significant factor. Not surprisingly, 36 of 72 as yet unidentified signers were new appointees during the 1775-85 period. The disruptions of war, the post-war unsettlement, the toppling of the Quaker establishment and rise of a new political order all undoubtedly were contributing factors. Simply expressed, it was a time of major change which swept out the old and brought in many new, previously unknown, vigorous personalities.

Chronologically, Pennsylvania's paper money issues and signers fall into four distinct periods: 1723-49, 1755-60, 1764-73, and 1775-85 (see Table 1). Each era evidences its own specific characteristics in addition to common threads that encompass the entire 62 year span.

## 1723-49

The initial authorization of April 2, 1723, is archetypically representative of the first period, 1723-49. All four signers of the notes were important men on the contemporary scene. Anthony Morris, Jr. was the fourth member of his family to carry that name. Born in London March 15, 1661/2, he emigrated to North America in February 1682/3. Extremely active as a merchant/investor, Morris owned part of a brewing business, participated in at least six iron furnaces and forges, and held several corn and gristmills in addition to being a large landowner. Elected to the Philadelphia Common Council in 1715, he also was a member of the Pennsylvania Colonial Assembly for five years 1721-26, and the Mayor of

Philadelphia 1738-39. Several other Morrises followed this Anthony, Jr., as important figures in Philadelphia and Pennsylvania's commercial and political history. A total of ten Morrises signed the Colony's currency including the Anthony Morris, Jr. of the April 3, 1772 issue who, as a Major in the Philadelphia Troop, died of wounds received January 3, 1777, at the Battle of Princeton.

Frances Rawle, the second signer of the April 2, 1723 notes, came to the Colony June 23, 1686, with a patent from William Penn to 2,500 acres of land. Settling in what is now Montgomery County, Rawle founded a community known as "The Plymouth Friends," was a member of the Colonial Assembly for 11 years between 1704 and 1726 and was appointed to the Provincial Council in 1724, serving until his death in 1726.

Charles Read, the third authorized April 2, 1723 signer, moved to Philadelphia from New Jersey prior to 1701. A member of the Common Council of Philadelphia 1717-22, Read then became an alderman and thereafter the Mayor of Philadelphia in 1725. Following his service as mayor, Read returned to the post of alderman and also was made a Sheriff of the City of Philadelphia.

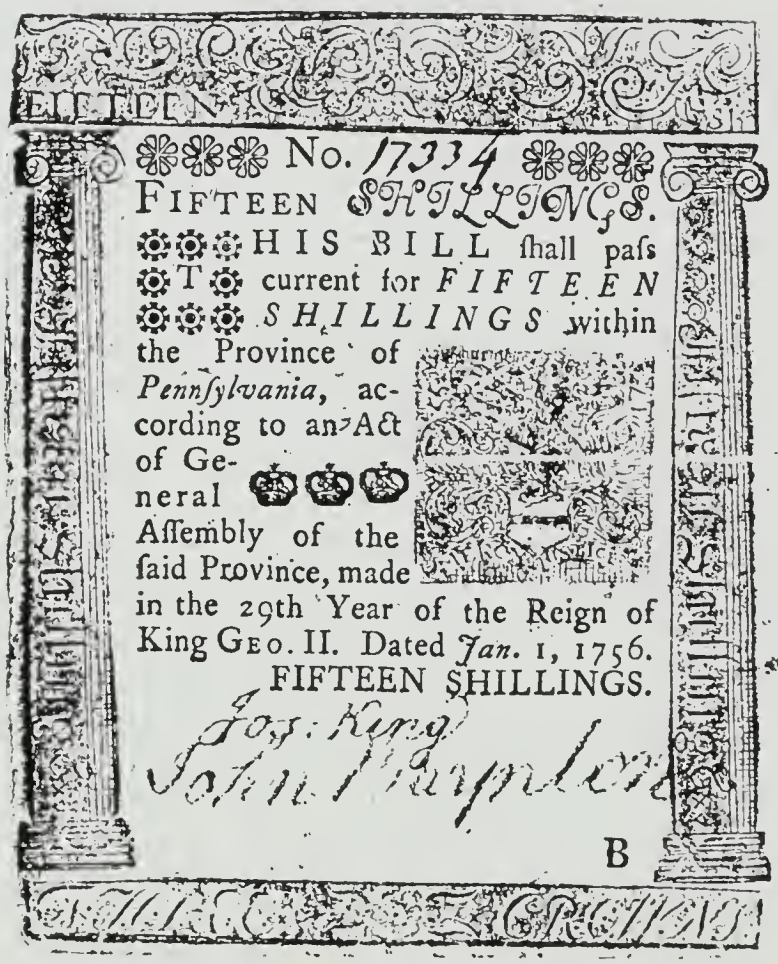
Less is known of Captain Benjamin Vining, the last signer of Pennsylvania's first notes. At one time, the "Port Collector of Salem and Marblehead in New England," he was a Justice of the Peace of Philadelphia from 1715 to 1717 and a Pennsylvania colonial assemblyman in the early 1720s. Following his retirement, Vining returned to Salem, New Jersey, where he died in the early 1730s.

Among the most notable signers of the later issues of the 1723-49 group are Peter Lloyd, a grandson of Thomas Lloyd, William Penn's Deputy Governor in the 1680s and 1690s and Thomas Tresse, who, with William Rittenhouse, Robert Turner and William Bradford, built the first American paper mill in 1690.

## 1755-60

The second series of Pennsylvania paper money issues encompassing the 1755-60 period presents a very different profile from the first group. Although, according to Henry Phillips, the stated purpose of the initial authorization dated October 1, 1755, was to exchange new notes for torn bills of previous issues, in fact, a large portion of this emission plus the nine others approved between 1756 and 1760 went for military costs incurred during the French and Indian War. Merchants account for more than 60% of the signers with prominent builders, professionals, and landed gentry comprising the remaining identifiable signers.

Among the commercially important individuals in the group is




2.

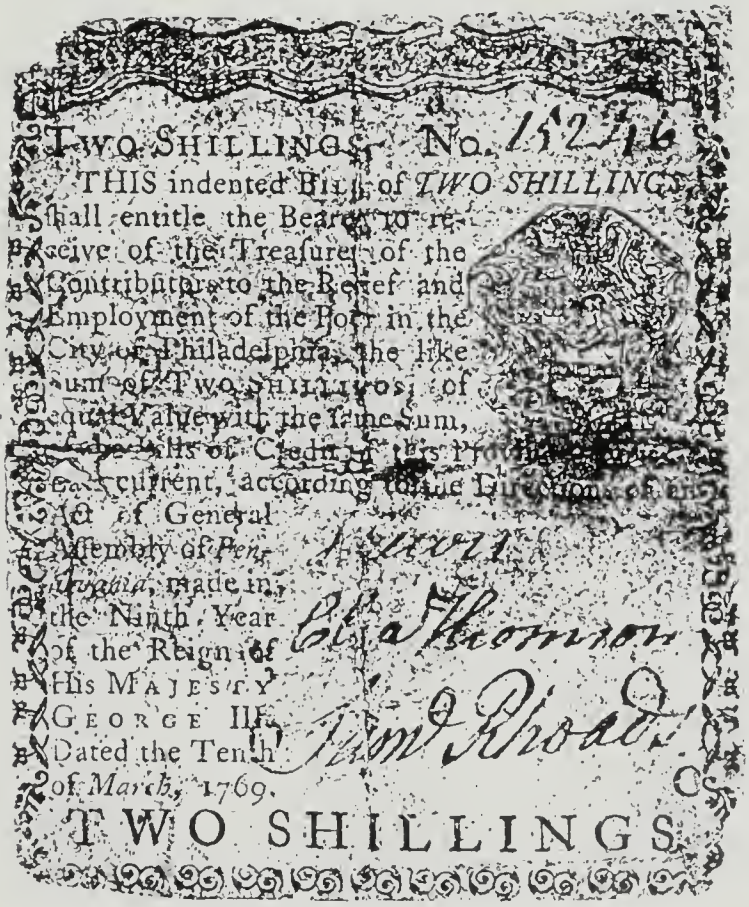
John Baynton. Baynton, a signer of the January 1, 1756 bills (fig. 2), initially was a respected international shipper of wheat and lumber in the 1750s through his firm, Baynton and Wharton. However, in 1763, following the expansion of the firm by the addition of George Morgan, the partnership began to engage in extremely large, speculative undertakings. A total of 300 men, 600 packhorses and 65 boats participated in Baynton Wharton and Morgan's illegal expedition into Illinois Indian country in 1766. This grandiose venture, targeted at trading with the Indians, French fur traders, the British Army and the Department of Indian Affairs, developed into a £120,000 disaster, causing the company to declare bankruptcy with the stresses eventually contributing to Baynton's death in 1770.

Samuel Wharton, his partner, and signer of September 21, 1756 and April 22, 1758 notes, survived the collapse of Baynton Wharton and Morgan, regained some of his assets, and, as indemnification for the destruction of his trade goods by the Indians of the Six Nations, received from its chiefs a grant of land on the Ohio River embracing about one quarter of the entire present state of West

Virginia. Wharton, however, failed to get confirmation of the grant from George III because of his Patriot sympathies. During and after the Revolutionary War, Wharton served on the City Council, the Philadelphia Committee of Safety and during 1782-83, was a member of the Continental Congress from Delaware.

Charles Thomson, whom John Adams termed "The Sam Adams of Philadelphia," signed four issues of the 1755-60 notes plus the March 10, 1769 authorization (fig. 3). A major personality in the Patriot cause, Thomson was a key figure in the Sons of Liberty, became the Secretary of the First Continental Congress, attested John Hancock's signing of the Declaration of Independence as the Secretary of the Continental Congress and held the post of Secretary to Congress for more than 15 years (1774-89).

The 1755-60 roster includes, in addition, Samuel Rhoads, a major builder, Quaker legislative leader, Mayor of Philadelphia and member of the Continental Congress in 1774 and 1775, plus Daniel Roberdeau, a merchant member of the Philadelphia Committee of Safety, the first Brigadier General of Pennsylvania Troops and a member of the Continental Congress (1777-79). Roberdeau signed the January 1, 1756 issue, and four other emissions of the 1764-73


TWO SHILLINGS No. 112 16

THIS indented Bill of *TWO SHILLINGS* shall entitle the Bearer to receive of the Treasurer of the Contributors to the Relief and Employment of the Poor in the City of Philadelphia, the like Sum of TWO SHILLINGS, of equal Value with the true Sum, according to the Directions of an Act of General Assembly of *Pennsylvania*, made in the Ninth Year of the Reign of His MAJESTY GEORGE III. Dated the Tenth of *March*, 1769.

Chas Thomson

Tho Rhoads

TWO SHILLINGS

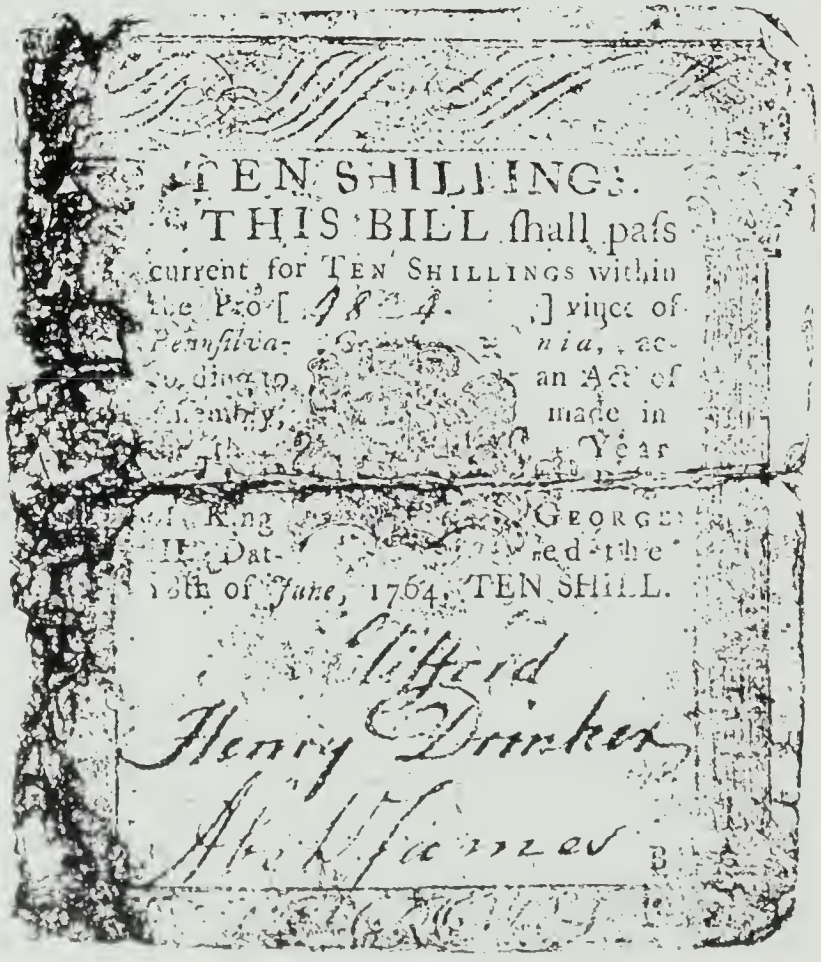
3.

period. Four members of the extremely important Wharton family also signed currency between 1755 and 1760. Samuel, previously cited, of Baynton Wharton and Morgan; Thomas, Sr., a merchant and Quaker pacifist interned during the Revolutionary War; James, who supplied most of the cordage for the Revolutionary Navy; and Joseph, another major Philadelphia merchant.

## 1764-73

Merchants again dominated the 1764-73 issues, accounting for over 70% of the known signers of this group. Some had achieved sizeable wealth by the time of the Revolution—and continued to add to their fortunes well into the 1780s.

Becoming a merchant, however, was not an automatic passport to success. Importing and trading involved taking substantial risks—and assuming them again and again. The extended span of time between ordering goods and receiving them; the problems of vessel ownership and/or shipping space, the necessity of extension of several months credit for the payment of accounts receivable, and the vagaries of weather and crop harvests were only some of the




4.

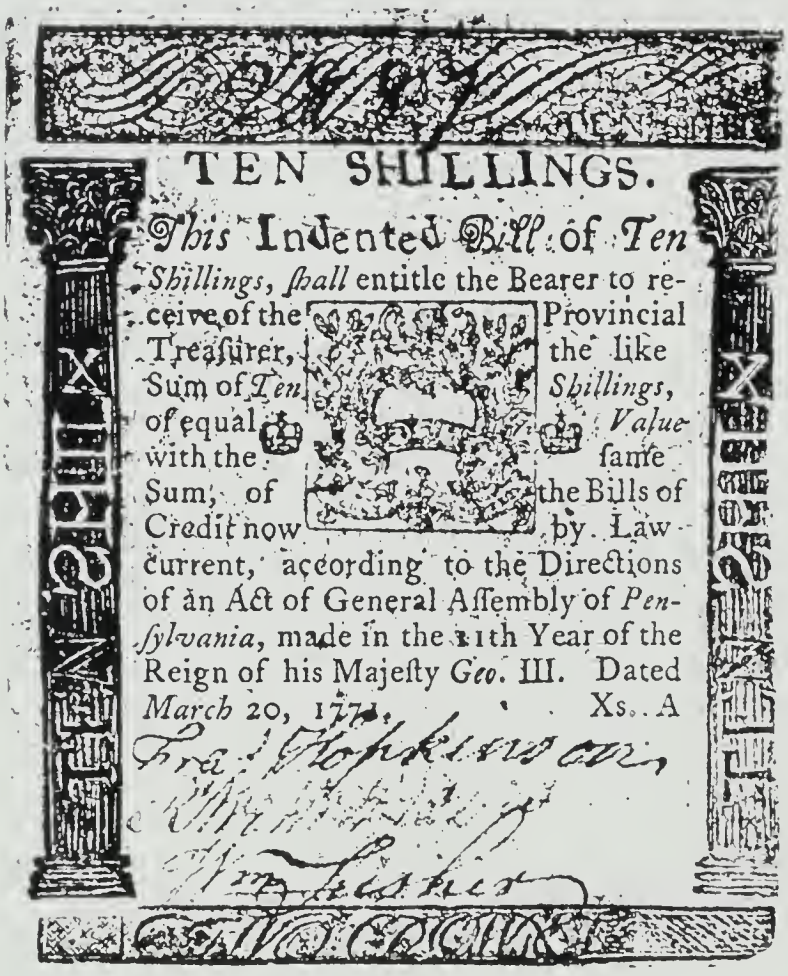
obstacles that made the financial positions of most merchants both volatile and stressed. Henry Drinker (signer of the June 18, 1764 notes, fig. 4), of the extremely important trading firm of James and Drinker, felt he had acquired sufficient wealth by the age of 42 to retire to become a country gentleman, but Abel James, his partner and signer of January 1, 1756, June 18, 1764 and March 10, 1769 notes, remained active and finally went bankrupt in 1784.

Although there were rapid rises and equally sharp declines in individual careers, Quakers dominated the merchant group with Anglican and several ethnically founded firms also visible as constants.

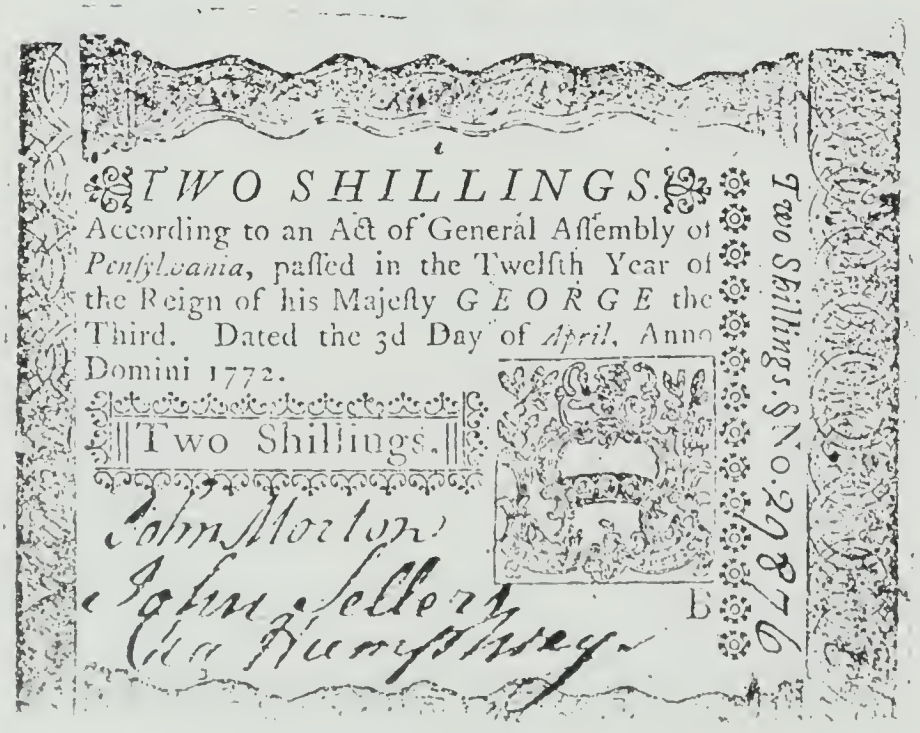
Philadelphia's growth into America's largest trading city is amply documented by the wide range of destinations of its merchant shipping in the immediate pre-Revolutionary period. Initially focused on Britain, with some sailings to the Caribbean, by mid-century Philadelphia's vessels were reaching Madeira, the Canaries, Spain and Portugal. By 1772 the city's merchants were ranging beyond the straits of Gibraltar to Leghorn, Barcelona and Genoa. James and Drinker, Joshua Fisher and Sons and Reese Meredith, father of Samuel Meredith, were among the most active. The largest firm, Willing and Morris, headed by Thomas Willing and Robert Morris, managed more than 20 sailings a year.

Imperfect research and acceptance by precedent have resulted in some errors in identification of the Colony's currency signers of German origin. During the closing years of the seventeenth century, William Penn and other Quakers undertook missionary trips to Germany and as early as 1682, members of a number of German Protestant sects, primarily Mennonites, began to emigrate to Pennsylvania.

In 1704, John Jacobs settled in Van Bebber's township, a Mennonite community adjacent to Germantown and there founded a very prominent Quaker family. Two of his grandsons signed Pennsylvania currency. Joseph Jacobs, a Philadelphia merchant, Treasurer of the Association Library and signer of the Non-Importation Resolution of 1765, signed bills issued June 18, 1764, and his brother, Benjamin, a lawyer, and member of the Philadelphia Council of Safety was authorized to sign Pennsylvania notes of April 10, 1777, and three issues of Continental Currency. John Jacobs, a third brother, was the last speaker of the Pennsylvania General Assembly prior to the Revolution. Israel Jacobs, a fourth brother, served in the second United States Congress and a sister, Hannah, married David Rittenhouse. According to available Quaker historical records, the Jacobs family were members of the Gwynedd Quaker meeting, and


TEN SHILLINGS.
This Indented Bill of Ten Shillings, ſhall entitle the Bearer to receive of the Treaſurer, the like Sum of Ten Provincial Shillings, of equal Value with the ſame Sum, of the Bills of Credit now by Law current, according to the Directions of an Act of General Aſſembly of Penſylvania, made in the 11th Year of the Reign of his Majeſty Geo. III. Dated March 20, 177
Xs. A
TEN
X
TEN SHILLINGS.

5.


TWO SHILLINGS.
According to an Act of General Aſſembly of Penſylvania, paſſed in the Twelfth Year of the Reign of his Majeſty GEORGE the Third. Dated the 3d Day of April, Anno Domini 1772.
Two Shillings.
B
Two Shillings. No. 2876

6.

not Jewish, as has commonly been believed.

Frances Hopkinson (fig. 5), John Morton (fig. 6) and George Clymer, three signers of the Declaration of Independence are also in the 1764-73 group, as are several members of each of the Fisher, Mifflin, Morris and Wharton Quaker merchant families.

## 1775-85

The final group of signers reflects the continuing diversification and increasing specialization of Pennsylvania's economy mirroring the growing population and, most importantly, the shift of political power from the Quaker merchant establishment to the radical Patriot group comprised of smaller shopkeepers, artisans and minor tradespeople who took control of the Pennsylvania's state and local governments via the Radical Committees system which surged into prominence in 1774. The extremely sensitive and divided character of the subsequent political environment is capsulized in an episode now known as the "Virginia Exiles."[2]

In the fall of 1777, Washington retreated from New York through the City of Philadelphia to find winter quarters for his beleaguered forces. As he passed through the city, he sought food and supplies. The new Patriot government approached several leading Quakers, trying to satisfy Washington's needs. Based on their religious convictions, political conservatism and economic interests, many were reluctant to assist the Revolutionary Army. Thirty men were summarily arrested including Henry Drinker, Abel James, Thomas Fisher of Joshua Fisher and Sons, three members of the Pemberton family, Thomas Wharton, Sr., a cousin of Governor Thomas Wharton, and Owen Jones, Jr. son of the Treasurer of the Province from 1769 to 1776. (Jones was arrested in error under a warrant issued for his father.) Seventeen of the men were of sufficient community stature to have previously signed Pennsylvania currency. (Phineas Bond had signed only Continental Currency—and two men, Samuel Murdock and William Smith, "Druggist," signed the later March 16, 1785 issue; see Table 4.) Given no opportunity to reason with the government authorities, 22 internees were ordered to be moved under military guard to the western Virginia border where they remained in confinement through the winter of 1777/8.

On April 10, 1778, after several appeals, Pennsylvania's executive Council gave the prisoners permission to return north. Lending additional support, from Valley Forge George Washington asked Governor Thomas Wharton to allow four of the internees' wives and their wagons carrying food and medical supplies to go at least as far as Yorktown to assist their families and friends. Regrettably

**Table 4**

ARRESTED QUAKERS AND ANGLICANS WHO SIGNED CURRENCY

| *Name* | *Issue* |
|---|---|
| Phineas Bond | CC11/29/75 |
| Thomas Coombe | PA 4/3/72, CC 5/10/75, 11/29/75, 2/17/76, 5/9/76 |
| Henry Drinker | PA 6/18/64 |
| Thomas Fisher | PA 4/3/72 |
| Joseph Fox | PA 10/1/5, 3/10/69 |
| Abel James | PA 1/1/56, 6/18/64, 3/10/69 |
| Charles Jervis | PA 3/20/73, 10/25/75 |
| Owen Jones, Jr. | PA 10/1/73 |
| Samuel Murdock | PA 3/16/85 |
| Israel Pemberton | PA 6/15/67, 3/1/69 |
| James Pemberton | PA 10/1/55 |
| Edwrad Penington | PA 10/1/55, 7/1/57 |
| Samuel Pleasants | PA 4/3/72 |
| George Roberts | PA 6/1/64 |
| Hugh Roberts | PA 10/1/55 |
| William Smith (Broker) | PA 12/8/75, 4/25/76 |
| William Smith (Druggist) | PA 3/16/85 |
| Charles Stedman | PA 1/1/56 |
| Jeremiah Warder | PA 4/3/72 |
| Thomas Wharton, Sr. | PA 6/18/64 |

two of the Quakers did not make the springtime journey. They had died during the winter.

Not surprisingly, a number of Patriot government and military officers who played substantial roles in initiating and undertaking the sequestration of the Virginia exiles also were signers Pennsylvania currency. The committee named by the Pennsylvania assembly to carry out the Quakers' arrest included James Cannon, Sharp Delany, James Loughead, John Purviance and Robert Smith. James Claypoole and Nathaniel Donnell of the Committee signed Continental Currency.

Officials of the new Patriot government: George Bryan, Samuel Caldwell, James Budden and Jonathan Evans who signed Pennsylvania currency and John Bayard, Daniel Levan, Alexander Nesbitt and Tench Tilghman—signer of Continental Currency, all participated in the incident (see Table 5).

## Table 5

PARTICIPANTS IN THE QUAKER PRISONER STORY

| *Name* | *Issue* |
|---|---|
| *Governmental and Military Figures* | |
| John Bayard | CC 5/10/75, 11/29/75 |
| George Bryan | PA 5/20/58 |
| James Budden | PA 4/20/81 |
| Samuel Caldwell | CC 11/29/75, 4/20/81, 3/1685 |
| Jonathan Evans | PA 10/1/55, 1/1/56, 6/18/64 |
| Daniel Levan | CC 5/20/77 |
| Alexander Nesbit | CC authorization of 8/8/78 |
| John Smith | PA 10/1/55 |
| Tench Tilghman | CC 2/17/76 |
| *Committee Named by the Pennsylvania Council to Carry Out the Arrests of the Quakers* | |
| James Cannon | PA 4/10/77 |
| James Claypoole | CC 5/20/77 |
| Sharp Delany | PA 7/20/75 |
| Nathaniel Donnell | CC 4/11/78, 9/26/78, 1/14/79 |
| James Loughead | PA 3/16/85 |
| John Purviance | PA 7/20/75, 4/20/81 |
| Robert Smith | CC 2/26/77, PA 3/16/85 |
| *Quakers Who Aided the Prisoners* | |
| Samuel Coates | PA 4/3/72, 3/25/75 |
| Owen Jones, Sr. | PA 10/1/55 |
| Reynold Keen | PA 10/1/73 |
| Samuel Morris | CC 5/10/75, 11/29/75, 2/17/76, 5/9/76, 7/22/76 |
| John Reynell | PA 10/1/55, 6/15/67, 3/1/69 |
| Samuel Rhoads | PA 10/1/55, 6/18/64, 6/15/67, 3/10/69 |

In all, 43 signers of Pennsylvania currency and Continental Currency were involved in the episode—21 who were arrested, 16 political and military officials and 6 men who aided the Quakers after their arrest.

With the signing of the March 16, 1785 issue, the era of Pennsylvania government emissions came to a close. Thirty-six issues aggregating £2,253,150 had been authorized. In addition, a $1,250,000 emission dated June 1, 1780, carrying the guarantee of the Continen-

tal Congress, was payable in Spanish milled dollars and the $300,000 of the March 21, 1783 issue, was payable in undesignated specie.

It appears highly probable that a substantial majority of currency signers were members of the General Assembly or held other government posts at the time that they signed the authorized bills. Logically, all or virtually all were Philadelphians or residents of neighboring counties. Although merchants dominated the 308 total signers population, the character of the group unquestionably changed substantially during and after the Revolutionary War. Patriot activists, many of whom were minor tradesmen, storekeepers, craftsmen etc., became a much more prominent element. Having taken control of the State's financial affairs including the signing of currency, it is not surprising that half of the presently unidentified signers were active in the 1775-85 period. Despite this deficiency, adequate data is available to supply a provocative and plausible analysis of this aspect of the commercial, political and social history of our Keystone State.

[1] The information contained in this article derives from the following sources:

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[2] The writer wishes to acknowledge with thanks the contribution of W. Philip Keller, whose aid and assistance relating to the Virginia internees began as early as 1979.

# Weight Analysis of Abel Buell's Connecticut Coppers

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## Introduction

Following cessation of the Revolution, the economy of the American Confederation was in shambles, the nation having been plunged into a serious depression. The country was staggering under an oppressive war debt, the price of credit was high, exports faltered, a massive trade deficit existed, and bankruptcies were commonplace. Although silver and gold were in very short supply, there was an excess of copper money. For years, this small change medium was composed of English coppers but these regal issues, both in England and its American colonies, had become diluted with large numbers of lightweight, counterfeit halfpence. After the Revolution, the flow of spurious coppers into American commerce resumed as each arriving ship from England brought more and more counterfeit copper currency into the country. These false coins were imported at a considerable profit to speculators and it was estimated that this false money comprised from 50 to 95% of the circulating small change medium during the Confederation period. The problem was intensified since the general public was indifferent about these counterfeit coppers which they accepted "without discrimination," together with genuine halfpence, as long as they received the established token value. Legitimate and counterfeit coppers circulated in parallel.[1]

A memorial recorded in the *American State Papers* succinctly summarized the situation:

> The coinage of copper is a subject that claims our immediate attention. From the small value of the several pieces of copper coin, this medium of exchange has been too much neglected. The more valuable metals are daily giving place to base British half-pence, and no means are used to prevent the fraud. This disease, which is neglected in the beginning, because it appears trifling, may finally prove very destructive to commerce.[2]

Several state legislatures attempted to curb the economic injury caused by this unrestricted volume of counterfeit coppers, since it was perceived that these false coins were inflicting financial damage especially on the poorer, working classes. In 1781, the Pennsylvania legislature issued a decree recommending "all the faithfull [*sic*] inhabitants of this State to refuse it [i.e. counterfeit British halfpence] in payment, and by all other lawful ways and means discourage the currency thereof...." A more definite course was adopted by Vermont and Connecticut in 1785, New Jersey in 1786, and Massachusetts in 1787. These four jurisdictions responded with a

plan to replace these spurious coppers with a high grade, pure copper, state coinage on the theory that these new coppers would be received preferentially in commerce and thus drive the lightweight counterfeit imports out of circulation. New York undertook a different stratagem in 1787, demonetizing all coppers less than 145.8 gr and revaluing all others from 14 to 20 per local shilling.[3]

According to the measure adopted by the Connecticut legislature in 1785, a franchise was granted to the Company for Coining Coppers of New Haven for the purpose of providing reliable, small change copper coins for the state. The authorized coins were to weigh 144 gr of pure copper and a 5% royalty was due to the state for this monopoly. This coinage spanned from 1785 to 1789 during which period at least five additional illegal mints also participated in the production of the 350 or more known varieties of Connecticut coppers. These clandestine enterprises were clearly illegal operations which avoided the 5% payment to the state and whose coppers made no attempt to meet the authorized weight of 144 gr.[4]

The official design chosen for the Connecticut coppers was influenced by the motif on the contemporaneous English halfpence; these in turn, when first minted in 1672, were inspired by the A.D. 140 sestertius of Antoninus Pius commemorating his triumph over the Britons (figs. 1-2).[5] This classical numismatic theme was now continued in Confederation America 1,645 years later.

The die sinker for the Company for Coining Coppers was the well known engraver, Abel Buell, described by his biographer as "an uncommonly ingenious mechanic." Buell was a man of many talents with several inventions and accomplishments to his credit. One of his youthful misadventures, however, left him with a cropped ear

1. Sestertius of Antoninus Pius

2. 1774 George III halfpence

and branded forehead when convicted for the alteration of paper currency.[6] Buell was responsible for all the 1785-dated Connecticut copper dies with the probable exception of the famous "African head" which appears to be from a different source.[7]

Buell introduced a new design, the Mailed Bust Left, dated both for 1785 and 1786. In preparing these issues, Buell employed a new technology by which all dies were sunk from a common complex hub so that these several issues were "mechanically identical" with the individual details of punctuation and some ornamentation later strengthened by hand. This was a very advanced procedure for the times and a testament to Buell's innovative genius. The hallmark of the Company for Coining Coppers was the large letters in the legends. It is further postulated that the legend ornamentations on Connecticut coppers, be they crosses, fleurons, cinquefoils, or scrolls, comprise a yet undeciphered code relative to some aspect of the minting process, such as the signature of the die sinker or the mark of the issuing mint.

In 1786, Buell next introduced the first of the Draped Bust Left series, a style which was then continued into 1787 with some 29 varieties having been identified from the New Haven mint of the Company for Coining Coppers.

Another series, struck from Buell's hand engraved dies, comprised the 1787 Mailed Bust Left issues. This small group is composed of the very rare 1787 Hercules head and the Miller 8 obverses which were cut by hand and not impressed from a common hub.

The Company for Coining Coppers ceased its legal operation on June 1, 1787, when the firm was reorganized with James Jarvis as the principal stockholder. This new business entity was created for the purpose of minting Fugio cents under a Federal contract. Records do not clearly indicated whether or not the Jarvis Mint was legally sanctioned to strike Connecticut coppers, but nonetheless, Jarvis continued production of 1787 Connecticut coppers with Buell's Draped Bust Left design using Federally owned copper stock embezzled from the Fugio project. The earlier 1787 Draped Bust Left coppers from the Company for Coining Coppers are distinguishable from the later issues of Jarvis and Company minted after June 1, 1787, by the size of the lettering; large letters in the legends are characteristic of the former, while smaller letters are found on Jarvis's coins. Connecticut coppers attributed to Jarvis also have other features, particularly the cinquefoil and certain letter punches, in common with Fugio cents.[8]

This attribution of mint based on letter size is supported by examination of the die analysis chart for Connecticut coppers wherein

the large lettered 1787 Draped Bust Left coppers are related to the 1786 issues through biennial pairing; 22 of the 29 1787-dated large lettered issues are seen to be die-linked to the earlier 1786 Draped Bust Left Coppers from the Company for Coining Coppers.[9]

It appears that Jarvis and Company continued to mint 1787 small lettered Draped Bust Left coppers from June 1, 1787, until September 1788. It was at this time the fraud in the Fugio project was uncovered and the Federal contract was voided. The 1787 Draped Bust Left coppers with small lettering are by far the most common Connecticut type coin today, and survivors are about six to eight times more common than their earlier large lettered counterparts from the Company for Coining Coppers.[10] Usable Draped Bust Left hubs were combined later with new 1788 reverses and additional coppers illegally struck from an undetermined location, but probably Machin's Mills.

After dissolution of the Jarvis enterprise in September 1788, the engraver, Abel Buell, fled to England because of some anxiety on his part relative to the collapse of the Fugio project. Records indicate that on his departure, Abel left his son, Benjamin, in control of his coining interests at a time prior to April 1789. The state legislature subsequently suspended the original authorization to mint coppers effective June 20, 1789.[11] Breen conjectures that Abel Buell had turned over to his son the existing obverse and reverse hubs of the Triple Leaves Connecticut coppers, which he, the father, had engraved.[12] While these 1787 coppers have well executed central figures impressed from hubs, the finished legends are amateurish with Fugio-type cinquefoils on many, and certainly are not the work of the senior Buell. The coppers were probably back-dated "1787" but minted in 1789, a circumstance which is not surprising since commonly the dates on the Confederation coppers are no guarantee as to when the coins were actually struck. These Triple leaves hubs and some old, yet serviceable 1787 completed dies later came into the possession of the illegal Machin's Mills mint and were used for 1788-dated coppers, a story to be related.

After James Jarvis and Benjamin Buell terminated their minting activities, it is speculated that their usable equipment was procured by Machin's Mills. Most Connecticut coppers dated 1788 are attributed to that mint, since none can be positively linked to any authorized facility.[13] This explains why Buell's Triple Leaves and Draped Bust Left obverse punches appear again on 1788-dated coins. In fact 7 of his old 1787 dies were recombined with new 1788 reverses producing 12 biennially paired combinations. The sponsor of these 1788 coppers had no regard for weight standards since

these and all other 1788 coppers fall between 112 and 120 gr. Obviously, when coppers were produced in clandestine operations, lightweight coins are expected since by avoiding the 5% royalty and skimping on planchet thickness, a greater profit margin could be realized. The authors of these series were concerned only with personal gain and had no regard for improving the quality of the circulating copper medium. Even though the intrinsic value of all coppers at best was never more than half their monetary value, there was a developing public consciousness concerning the quality and quantity of this copper medium as people were becoming more discriminating as to what they would receive even as token currency. In fact, the addition of these illegal lightweight Connecticut counterfeits to the circulating pool of small change currency only adulterated it further and hastened the demise of the medium during the Coppers Panic of August 1789.[14]

## Methods

In research for my book,[15] I recorded the published weights of all Confederation coppers available to me from the numismatic literature.[16] My purpose was to determine how well the various mints achieved their expressed goal of supplying full weight coppers as an alternative to replace the hodgepodge of counterfeit coppers which comprised the majority of the circulating small change medium. I firmly believe that all coinages must be studied from the aspect of contemporary circulating money; in this instance did these coppers satisfy the popular demand for a good quality token currency? For Connecticut the standard weight for copper money was 144 gr, in Massachusetts it was 157.5, while in New Jersey it was 150. Such a gravimetric analysis would accomplish two objectives: first of all I could determine whether the various legal state or contract mints actually delivered to their citizens the full weight coppers they promised; and secondly I could look for weight variation within specific issues. If coin weights were inconsistent within the same type, this would suggest the presence of more than one planchet population. Such a variation could result from a change in planchet production, an alteration in minting techniques, or perhaps a different mint or sponsorship over the workable life of the dies.

## Results

From the preceding historical summary, three categories of Connecticut coppers can be defined for the sake of discussion. First came the coins from Buell's dies struck at the authorized state mint or

mints, the Company for Coining Coppers, and perhaps its successor, Jarvis and Company; next there are coppers from unauthorized mints which were either struck from, or muled with, Buell's dies, and lastly there were contemporaneous counterfeits from clearly illegal sources from dies which have been attributed to others such as Walter Mould and James F. Atlee.

**Table 1**

WEIGHT ANALYSIS OF CONNECTICUT COPPERS DATED 1786 TO 1788 FROM ILLEGAL MINTS[a]

| *Description* | *Weight* | *Error* | *Sample Size* |
|---|---|---|---|
| 1786 Mailed Bust Right | 116.8 | 19.4 | 34 |
| 1787 New Jersey related | 122.5 | 12.0 | 64 |
| 1787 Muttonheads | 131.0 | 12.1 | 19 |
| 1787 Machin's Mills related | 115.9 | 13.6 | 49 |
| 1788 Mailed Bust Right, not o/s | 112.8 | 13.2 | 40 |
| 1788 Mailed Bust Right, o/s | 112.3 | 7.9 | 27 |
| 1788 Triple Leaves, not o/s | 121.0 | 16.3 | 57 |
| 1788 Triple Leaves, o/s | 115.8 | 5.4 | 15 |
| 1788 Draped Bust Left | 118.7 | 14.7 | 79 |

[a] o/s = overstruck.

In a weight analysis, the counterfeits from the several illegal mints were all well below the authorized weight, averaging mostly in the range of 115 to 120 gr, except for the slightly heavier Muttonheads at 132 gr. The error recorded is the first standard deviation, which is an expression of the variation in coin weights around the mean. The greater the first standard deviation, the greater the range in planchet weights. These counterfeit Connecticut coins did not contribute in the least to the improvement of the lightweight copper medium but rather degraded it further.

The current study concerns a detailed weight analysis only of those coppers struck from dies engraved by Abel Buell. These specimens include: 1) the 1785 to June 1787 issues from the Company for Coining Coppers; 2) the June 1787 to September 1788 output of the Jarvis mint; 3) those 1787-dated Triple Leaves varieties probably manufactured in 1789 from a yet undiscovered location; and 4) those 1788 coppers made from old 1787 obverses or new dies from Buell's central hubs but finished by other unknown in-

dividuals and minted at an illegal facility. These particular issues have been selected since the engraver is known, in many instances the mint is relatively certain, the census represents all the legally minted coppers, and there are sufficient specimens for a meaningful analysis.

Now that we have seen that coppers from illegal mints fell far below the standard, the first question can now be asked, how well did the Company for Coining Coppers succeed in achieving the authorized 144 gr?

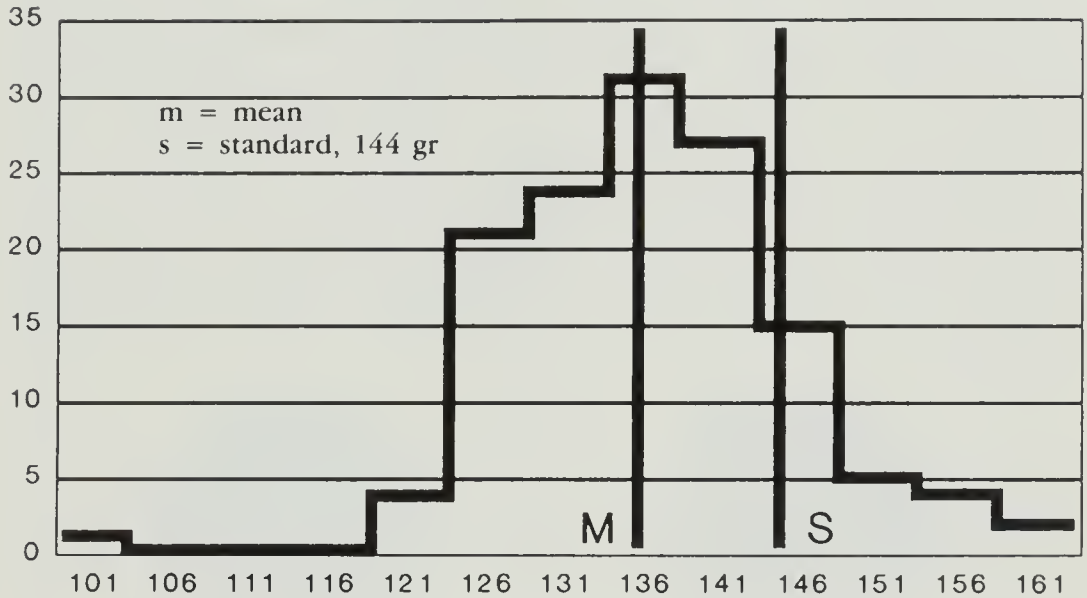
**Table 2**

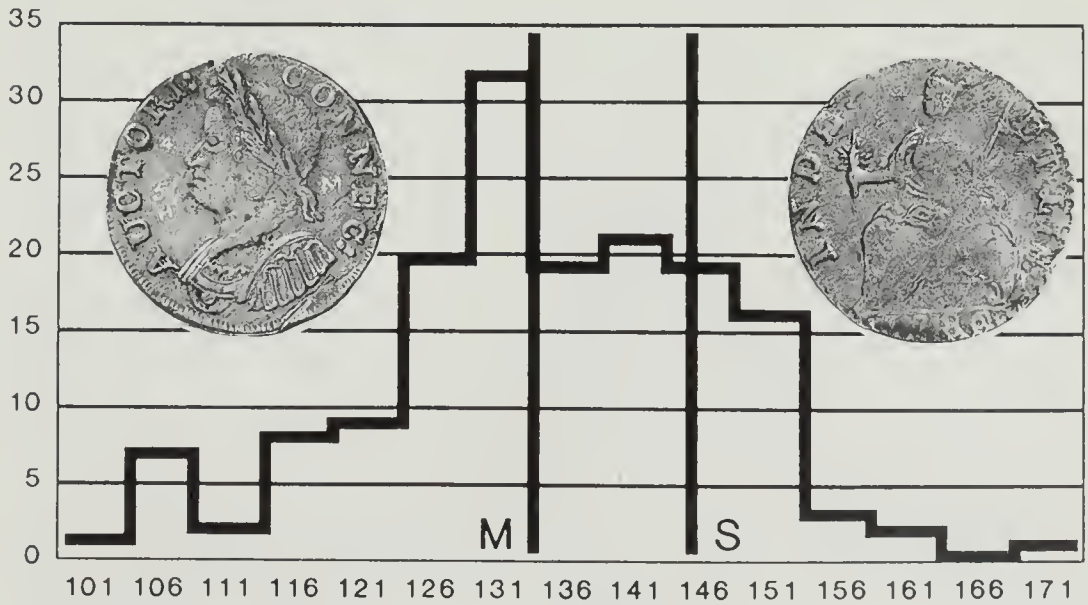
WEIGHT ANALYSIS OF CONNECTICUT COPPERS DATED 1785 TO 1787 FROM DIES ENGRAVED BY ABEL BUELL

| *Description* | *Weight* | *Error* | *Sample Size* |
|---|---|---|---|
| *Company for Coining Coppers* (Large Lettering) | | | |
| 1785 Mailed Bust Right (MBR) | 134.8 | 9.0 | 134 |
| 1785 Mailed Bust Left (MBL) | 136.3 | 9.0 | 18 |
| 1786 Mailed Bust Left | 134.4 | 13.1 | 142 |
| Combined 1785/6 Mailed Bust | 135.3 | 11.2 | 294 |
| 1786 Draped Bust Left | 148.3 | 15.1 | 18 |
| 1787 Draped Bust Left | 143.5 | 11.6 | 109 |
| 1787 Mailed Bust Left | 143.8 | 11.8 | 27 |
| *Jarvis Mint* (Small Lettering) | | | |
| 1787 Draped Bust Left (DBL) | 134.6 | 12.0 | 610 |
| 1787 Draped Bust Left, crosses | 145.0 | 12.7 | 73 |
| 1787 Draped Bust Left, fleurons | 142.0 | 11.6 | 134 |
| 1787 Triple Leaves, All | 129.9 | 20.8 | 116 |
| Heavy | 144.4 | 14.5 | 37 |
| Light | 122.9 | 19.8 | 79 |

All 294 1785 and 1786 dated specimens from the Company for Coining Coppers, except the 1786 Draped Bust Left issues, can be combined as a homogeneous weight group at 135.3 ± 11.2 gr ($p = 0.1452$). Of importance, the first fifteen months' output from the legal mint falls below the authorized standard of 144 gr and is just barely within the limits of error. This deficiency is evident on the respective histograms (figs. 3-4).

3. 1785 MBR (Miller 1785 3.4-F.1)



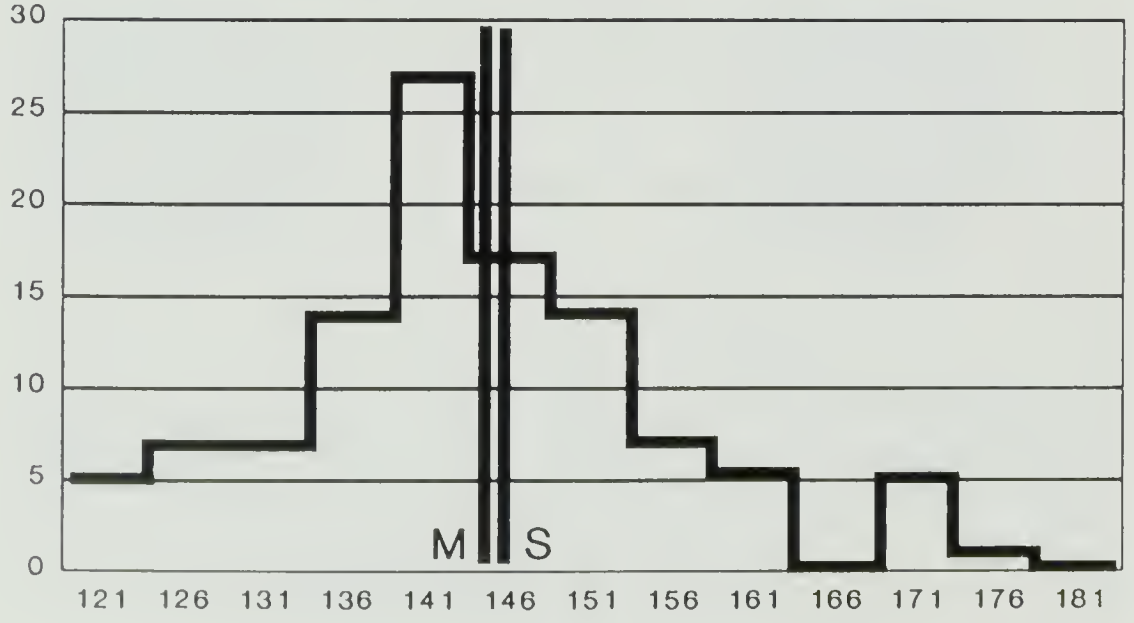

4. 1785/6 "CCC" MBL (Miller 1786 5.7-H.1)

The rare 1787 Mailed Bust Left issues from hand engraved dies are few in number with only 27 specimens in this study, but average weight of this small sample is very good.

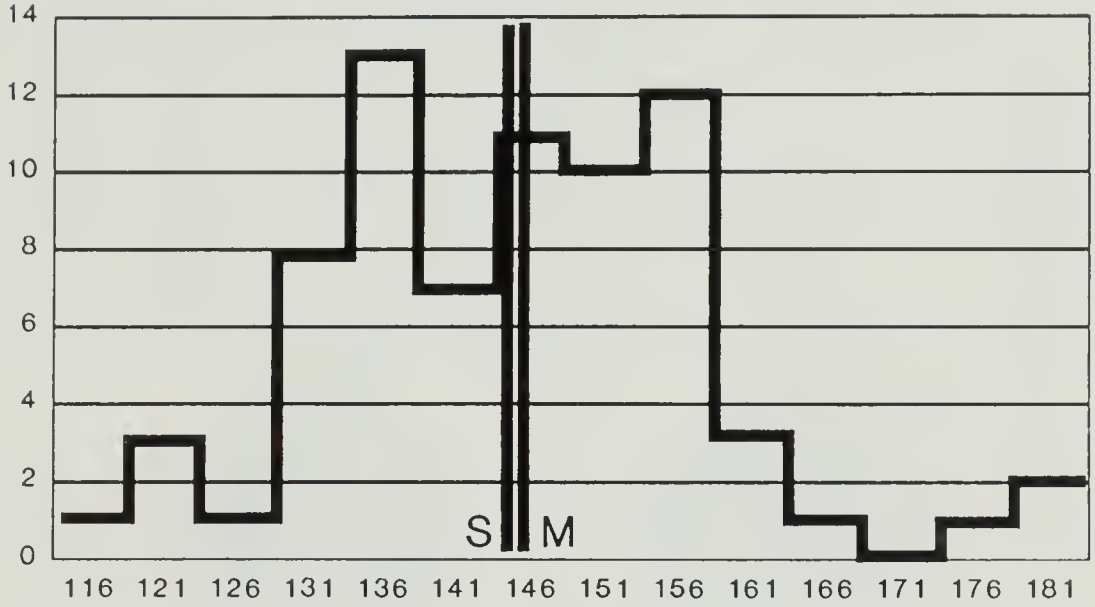
The new style Draped Bust Left coppers, first introduced in 1786, are very rare for that year with only 18 recorded weights available to me. Although these preliminary results suggest this group is much heavier than the required 144 gr, more specimens must be examined to determine the level of significance for this finding. For the following year, 1787, however, the Draped Bust Left with the larger letters from the Company for Coining Coppers are much more common and this group reaches the authorized standard both by statistical analysis ($p = 0.6787$) and within range of error at $\pm$ 11.6 (fig. 5).

After June 1, 1787, all legal coppers came from the Jarvis and Company mint whose legends are characterized by the smaller lettering. It was discovered on examination of the weights for the 1787 small lettered Jarvis varieties that this is not a homogeneous population.

5. 1787 "CCC" DBL (Miller 1786 7-K)



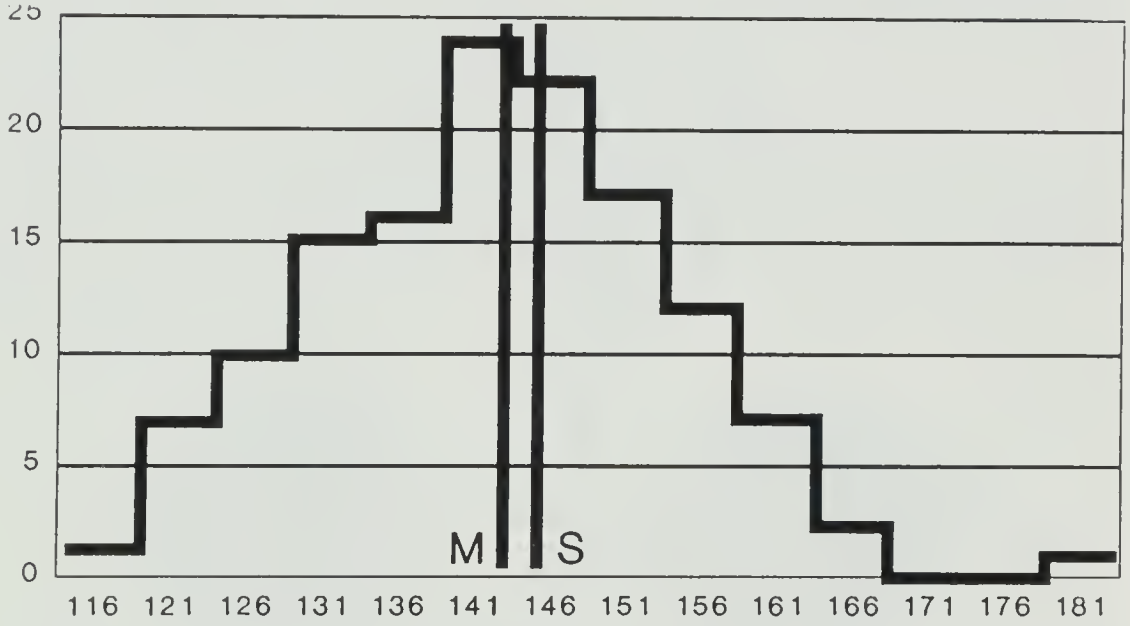
6. 1787 CROSS DBL (Miller 1787 18-g.1)




Those varieties with crosses in both the obverse and reverse legends with Miller attribution obverses 17, 18, 19, 21, 22, 24, 38 and 45 with the "g," "CC," "DD," "FF," and "GG" reverses weigh 145.0 ± 12.7 gr and exceed the legal requirement.[17] The histogram has the suggestion of a double distribution but no specific varieties are found to coincide with either peak (fig. 6).

The other subgroup which is distinctly heavier than the usual 1787 Draped Bust Left are the varieties with "fleurons" in their obverse and reverse legends. These ornamental fleurons vary in size and composition indicating that different punches were used to convey the required code, whatever it be. These coppers weighed 142.0 ± 11.6 gr and are in agreement with the 144 standard ($p = 0.0511$). This group includes Miller 1787 obverses 34, 36, 37, 39 and 56 together with reverses "e," "h," "i," "k," "l," "cc," "ee," "ff," "HH," and "RR."[18] The rare 1787 Miller varieties 48-g.5, 53-FF,[19] 37.5-e, 37.9-e, 37.7-h.2, and 37.15-h.3[20] appear to be transitional pieces with obverse fleurons and reverse crosses alone, or crosses and fleurons in combination (fig. 7).

7. 1787 "FLEURON" DBL (Miller 1787 37.4-k.1)




When these two heavier groups are removed from the entire 1787 Draped Bust Left population with small letters, the average weight of the coppers comprising the residual 135 varieties was only 134.6 ± 12.0 gr.[21] The difference between this average weight of 134.6 gr and the 144 gr standard has statistical significance, although this disparity falls within the limits of the first standard deviation of ± 12.0 gr (fig. 8).

This large group of Draped Bust Left coppers is by far the most common Connecticut type, with the populous 33-Z family alone accounting for 62 or more separate varieties. These coppers have characteristic cinquefoils, a design with five leaves, on both obverse and reverse. This same ornamentation was also used on the Fugio coppers from the same mint.

When the 1787 dated Triple Leaves coppers were inspected according to weight, two distinct populations became apparent. The individual die combinations responsible for the second peak are easily identified as 1787 2-B, 11.1-E, 11.2-K, and the rare 11.3-K. This group has been described by Breen as a "New Hub, Leaves in Triplets

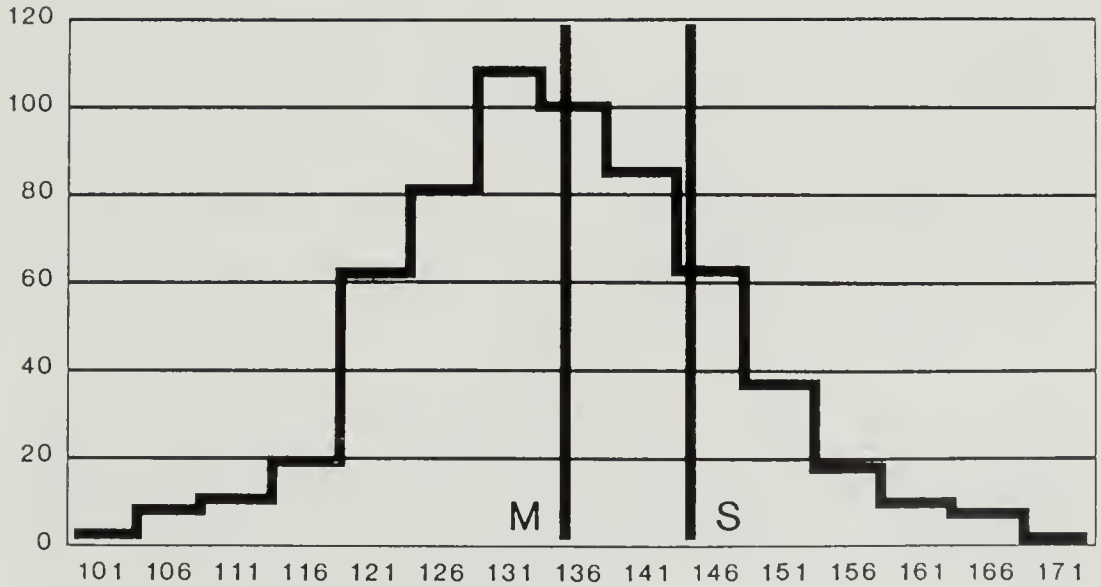
with paired berries, Large Letters and Small Dates" (fig. 9).[22] The high first standard deviation is an acknowledgement that there was a wide range in planchet weight due to less exact manufacturing precision than available at the Company for Coining Coppers or its successor, Jarvis and Company. An interesting rare mule exists, Miller 1787 37.6-B, which combines a fleuron obverse with a Triple Leaves reverse, but this marriage could have occurred at a later time.[23]

The 10 1787 Light Triple Leaves varieties are alike in weight to the non-overstruck 1788 Triple leaves at 121.0 ± 16.1 gr ($p = 0.4673$; Table 1). This suggests a similar planchet fabric which is neither that from the Company for Coining Coppers nor the Jarvis facility (fig. 10).

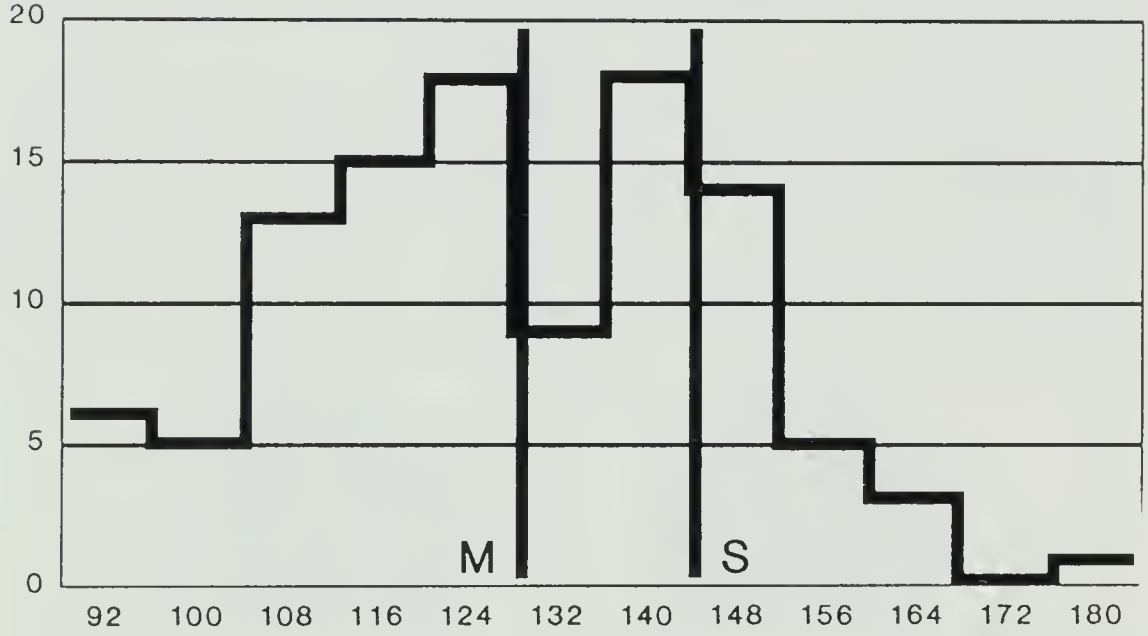
The 1788 dated Draped Bust Left issues, while using Buell's hubs, are considerably lighter than any previous coppers of the same design with an average of 118.7 ± 14.7 gr (Table 1), a value which is nearly identical for the previous light 1787 and 1788 Triple Leaves samples (fig. 11).

The results of this gravimetric analysis of Connecticut coppers can now be summarized in a chronological sequence:

8. 1787 JARVIS DBL (Miller 1787 33.38-Z.23)



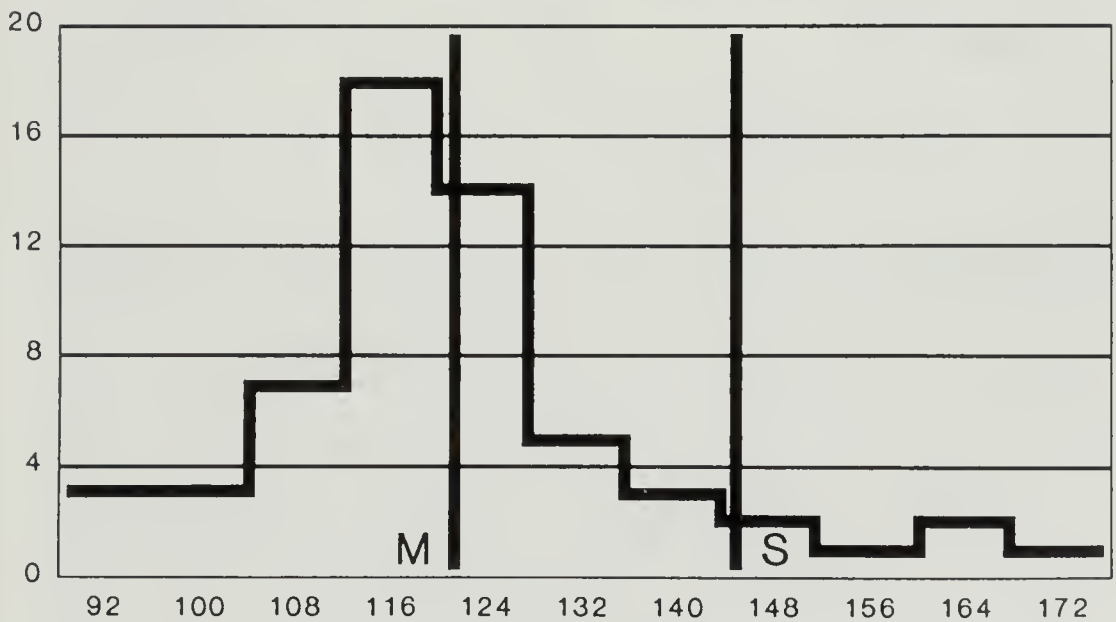
9. 1787 TRIPLE LEAVES (Miller 1787 2-B)




1. Coppers from illegal mints did not reach the 144 gr standard.
2. The 1785 coppers and the 1786 Mailed Bust Left coppers, all from the Company for Coining Coppers, the legal mint, just barely approached the authorized standard within the range of error.
3. Starting with the 1786 Draped Bust Left group, although their numbers are too few for any positive statements, the standard was exceeded. The same is true for the 1787 Mailed Bust Left series.
4. The 1787 Draped Bust Left coppers from the Company for Coining Coppers reached the standard.
5. The 1787 Draped Bust Coppers from the Jarvis Mint fell well below 144 which it barely reached within the range of error.
6. Those 1787 Draped Bust Left coppers with small crosses in both obverse and reverse legends were significantly heavier and exceeded the standard and for that reason have been separated from the other Draped Bust Left coppers from that mint.

7. Those 1787 Draped Bust Left coppers with fleurons in their obverse and reverse legends were also heavier and are considered a different population.
8. The 1787 Triple Leaves varieties contain two different populations. The heavier one exceeded the standard and was discovered to be composed of four die varieties similar in design. The 10 lighter varieties are similar in weight to the non-overstruck 1788 issues, both being in the low 120 gr range.
9. The 1788 Draped Bust Left coppers were similar in weight to the light population of the 1787 Triple Leaves and the non-overstruck 1788 varieties.

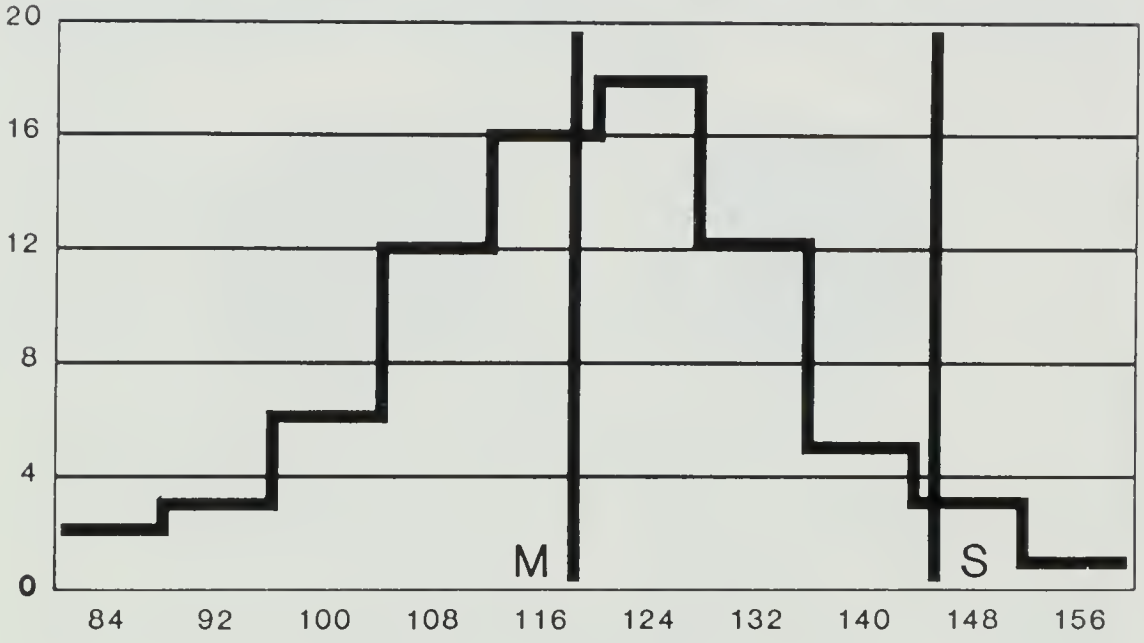
10. 1788 TRIPLES (not o/s) (Miller 1788 11-G)




## Discussion

Now what conclusions can be drawn from these data? These weight variations are obviously a reflection of inconsistencies in planchet preparation. Planchet production, itself, was probably the greatest challenge facing the early mintmaster using the primitive

11. 1788 DBL (Miller 1788 16.1-D)




equipment available.[24] While planchet diameter was a function of the diameter of the cutter, the most difficult chore was to roll the copper fillets to the correct thickness from which to cut flans. The more the copper stock was rolled, the more work hardened it would become; consequently it would require repeated annealing, or softening, for all subsequent passes through the rollers and prior to striking. Generally planchet diameters were consistent and any slight variation could be a matter of the pressure exerted by the coining press. It is known that multiply struck coins without collars have a wider diameter. The Tower Mint permitted a 2.5 to 3.33% weight tolerance for coppers struck there, but it is not recorded what remedy was allowed the Confederation mintmasters.[25] What level of precision can we reasonably anticipate from these early mints? Even if a 5% tolerance were postulated, then the acceptable range would be 136.8 to 151.2 grains.

As a group, the 1785 and 1786 Mailed Bust Right and Mailed Bust Left coppers fell 6.66% below the statutory requirement. Then in-

to 1786, and until its dissolution on June 1, 1787, full weight coppers were the rule for the Company for Coining Coppers.

In my opinion, it is unlikely that in 1785, the newly franchised Company for Coining Coppers would have embarked on a program of deception so early in its career. I believe that the initial emissions for the first 15 months were underweight because of technical problems in rolling the sheet copper to the proper thickness. When the geometry of these coppers is calculated, it becomes apparent that thickness of the copper fillets is very crucial in determining weight. Assuming a constant diameter of 28 mm and the density of the copper stock to be 8.84 g per cubic cc,[26] then the thickness required for a 144 gr coin is 1.71 mm. If the planchet stock were only 0.10 mm thinner, or the approximate thickness of a sheet of paper,[27] then the coins produced would weigh 135.3 gr, or the average of the 1785 and 1786 Connecticut coppers. It appears that into 1786 and 1787, these mechanical problems with proper roller spacing were overcome, since then coppers of required weight were manufactured at the Company for Coining Coppers.[28] So in at least the last six months of its life (until June 1787), this legal mint produced Mailed Bust Left and Draped Bust Left coppers which met the legislative challenge to replace lightweight counterfeits with quality, full weight, state coppers.

Within the 1787 large lettered Draped Bust Left population from the Company for Coining Coppers, there are several varieties with crosses or "×'s" in their legends, depending on the rotation of the figure. A similar design is on Jarvis's small lettered Draped Bust Left coppers with crosses and both populations of coins are of good weight.

Since the legend design contains some code, which Breen has suggested reveals the identities of "the different workman who completed the dies from Buell's hubs," the common theme in legend ornamentation and the near equal planchet weights implies that they were issued in sequence, and/or were from the same sponsor who had regard for the authorized standard. Supported by other collateral evidence, Breen has placed the small lettered cross varieties as the first group emitted from the Jarvis mint stating that "the group with crosses came first because cross ornaments were used on earlier Company (i.e. Company for Coining Coppers) dies."[29] The gravimetric evidence is compatible with that conclusion.

The other sample of small lettered 1787 Draped Bust Left coppers of acceptable weight is that group with fleurons. Breen has indicated that this fleuron group falls in an intermediate position between the earlier cross and the final cinquefoil coppers. As mention-

**Table 3**

COMPARISON OF "×" AND "+" CONFIGURATIONS IN LEGENDS OF DRAPED BUST LEFT CONNECTICUT COPPERS WITH CROSSES[a]

| *Large letters:* | | *Miller designation:* |
|---|---|---|
| Obverse: | × | 25, 26 |
| | × × | 20, 47 |
| | × × × | 46 |
| | + × × × | 27 |
| Reverse: | × + + + | a, b, AA, BB |
| *Small letters:* | | |
| Obverse: | + | 17 |
| | + + | 18, 19, 20 |
| | + × | 22, 38 |
| | × + × | 21 |
| | × + × + | 45 |
| Reverse: | + + + + | g, CC, DD, FF, GG |

[a] Large letter legend coppers are from the Company for Coining Coppers and the small letter legends are from the Jarvis Mint. There is a common pattern of ornamentation in the legends of these full weight coppers suggesting a code which could be the signature of the diesinker.

ed, several varieties share obverse fleurons and reverse crosses and are die-linked with the cross group (24-g.5 and 48-g.5; 24-g.5, 24-FF and 53-FF).

At the lower end of the weight spectrum are the lightest 1787 Draped Bust Left coppers with cinquefoils, a design that is shared with the Fugio cents. Breen has written that this large group comprises the last 1787-dated emissions from the Jarvis Mint. This largest category of all Connecticut coppers, Division III in the 1975 EAC catalogue, is characterized by "incredible haste and carelessness" in its production manifested by defective planchets, early die breakage, and corrected and uncorrected blunders in the legends.[30] Another circumstance which suggests they were the last issues is the observation that two Division III obverses are found biennially paired with 1788-dated issues.

The average weight of the 610 specimens with cinquefoils in this study was 6.5% below the standard. Since we know that their predecessors in business, the Company for Coining Coppers, had

been capable of full weight coppers, and being aware of Jarvis's reputation regarding the Fugio contract, my interpretation is that this deficiency was quite purposeful in order to augment profits. The full weight of the preceding three populations of Draped Bust Left coppers and the 1787 Mailed Bust Left issues indicates that the technology was available at the time for Jarvis to roll the fillets to the required 1.71 mm but he chose to ignore it. If the standard deviation of the average weight of his coppers was particularly high, then one might reason that his machinery was flawed and imprecise, and/or the copper purity uncontrolled, but the standard deviation for all these issues is similar, indicating a relative consistency in planchet weight. Such business practices which promoted lightweight coins caused further deterioration of the copper medium. The Jarvis mint was capable of producing heavier planchets since the Fugio coppers were minted by the same establishment, presumably from the same copper stock but rolled to a different thickness. The 667 specimens reported in a recent *CNL* database averaged 150.0 ± 12.7 gr, or 4.8% below the 157.5 gr Federal standard.[31]

For the 1788-dated Draped Bust Left coppers, the average weight was well below standard and these coins were the product of an illegal operation. This proposed emission sequence demonstrates that the 1787-dated Connecticut Draped Bust Left coppers while starting off with good weight under the auspices of the Company for Coining Coppers, then deteriorated in quality with the passage of time, which by inference was due to changing business practices within the operating mint.

The 1787 Triple Leaves also contain two distinct populations, lighter ones well below the legal requirement, and a heavier grouping which meets it. Both averages have a high first standard deviation which is an indication of a wide range in planchet weights. This variation is doubtless the result of difficulty in rolling the copper stock to a consistent thickness. These planchets are so different from those attributed to the Company for Coining Coppers and the Jarvis Company, they must have been the product of some yet unidentified mint. It becomes a matter of conjecture in this instance whether full weight coins are an indication of altruism on the part of the mintmaster or rather the result of an imperfect technology due to the inability to roll the fillets any thinner. The fact that the heavier coins have been isolated by Breen as a specific group raises the possibility that this one segment of the 1787 Triple Leaves dies was struck independently of its lighter peers. The lighter 1787 issues are equal in weight to 1788-dated Triple Leaves coppers, suggesting a common source. The presence of these two distinct populations

of 1787 Triple leaves may be explained by an earlier theory advanced by Breen. It was his conjecture that for a brief time Benjamin Buell struck coppers from his father's dies before relinquishing the equipment to Machin's Mills. One could elaborate further on this plausible scenario and suggest that the full weight 1787 Triple Leaves were made first by Buell and the lighter ones later came from Machin's Mills. This proposal is further strengthened by the observation that the heavy 1787 obverse Miller 11.1 is later reused at Machin's Mills in 1788 as Miller obverse 7, producing coppers 20 gr lighter.[32]

This paper has concentrated its emphasis on coin weight. One may reasonably ask, "Why all the concern about a 15% deficiency in the weight of a non-legal tender copper token which at best has only 50% intrinsic value?" "If a copper were only a token and received for a regulated value, what difference could it make whether the piece be genuine or counterfeit?" "Who would have cared if the rollers were offset by a few tenths of a mm and one token were slightly heavier than another?" All these are appropriate questions which can be answered by reading the newspaper accounts and the legislative actions of the late 1780s.[33] Those contemporaneous sources had much to say about the intrinsic worth of circulating coppers and considered that underweight coins cheated the public. While for years there was little attention paid to the composition of the copper medium, a definite concern evolved which I believe occurred when the accumulation of lightweight coppers reached such surplus proportions that people could not dispose of them in commerce since they could not be spent for large purchases or used in overseas transactions. The collapse of the copper medium occurred in the summer of 1789.

## Conclusions

Lightweight Connecticut coppers were due to:

1. Technical factors from inability to roll copper stock to appropriate thickness. This is demonstrated in 1785 and 1786 issues from the Company for Coining Coppers where their weight deficiency is thought to have arisen from imperfect rolling technology rather than purposeful deception.
2. Economic manipulations to augment profits. This was the case for all illegal mints that skimped on coin weight and likewise avoided the 5% royalty. The high standard deviation of the average weights also confirms planchet inconsistency. In addition to the obvious planchet production problems, these illegal mints intentionally produced lightweight coppers. In regard to

the Jarvis mint, I believe the rolling technology for correct sizing of the copper fillets was available in their facility but ignored. This was the case for the 1787 Draped Bust Left coppers with cinquefoils related to the Fugio coppers.

3. In studying the very large complex of 1787 Draped Bust Left coppers, the emission sequence is large letters, crosses, fleurons, and cinquefoils. The weight examination supports that conclusion, since as time progressed, the later 1787 dated coppers became lighter and quality deteriorated. Into 1788, all coppers were deficient in weight even though many of the dies were originally form an authorized source, namely Abel Buell.
4. The 1787 Triple Leaves coppers represent two distinct weight populations but the standard deviation, or variation in planchet weights, is similar. The standard deviation for these issues is greater than that for coins from both the Company for Coining Coppers and the Jarvis mint suggesting a different mint with less exact technique in planchet production.

While the weight analyses of these Connecticut coppers are interesting, these findings probably raise more questions than they solve. No attempt has been to correlate these data with a proposed die emission sequence.[34] In his exhaustive work, "James Jarvis and the Fugio Coppers," Damon G. Douglas stated, "The copper coinages in that critical period of American history, the first decade after the Revolution, still present unexhausted fields for fruitful research."[35] This present gravimetric study has attempted to correlate simple weight observations and naked eye examination with historical facts as we understand them today. The observations made here are in harmony with the earlier work of Breen reported in the oft-quoted 1976 ANS publication. In my opinion, this current report has barely scratched the surface but has defined areas for future investigation using such modern technologies as photographic superimposition for die punch examination and energy dispersive X-ray fluorescence spectrometry for planchet composition analyses to determine common copper sources. Damon Douglas was correct as he challenged us to continue investigation into this fascinating era of numismatics.

[1] Eric P. Newman, "English and Bungtown Halfpence," Eric P. Newman and Richard G. Doty, eds., *Studies in Money in Early America* (New York, 1976), pp. 134-72, esp. pp. 147-48; *Pennsylvania Mercury*, July 30, 1789. The 1976 American Numismatic Society publication is an excellent collection of essays on money in pre-Federal America. The chapter by Newman, together with that of Walter Breen, "Legal and Illegal Connecticut Mints," pp. 105-33 (hereafter cited as "Connecticut Mints,") comprise the background for this current paper.

[2] *American State Papers. Documents, Legislative and Executive, of the Congress of the United States* (Washington, 1832), Class 3, *Finance*, vol. 1, p. 101.

[3] Sylvester S. Crosby, *The Early Coins of America*, repr. ed. (Lawrence, MA, 1974), p. 172. This early work remains the undisputed authority on Confederation coppers.

[4] Breen, "Connecticut Mints." Other general references on the subject of Connecticut coppers by Breen include his landmark catalogue for The Early American Coppers Society Convention Sale, Feb. 15, 1975, henceforth cited as EAC, and, of course, his *Complete Encyclopedia of U. S. and Colonial Coins* (New York, 1988), hereafter cited as *Encyclopedia*. The Frederick B. Taylor Collection, Bowers and Merena, Mar. 26-28, 1987, contained 306 of the 350 known die varieties of Connecticut coppers. Connecticut coppers are identified and catalogued by punctuation in the legends according to a method devised by Crosby, Hall, and Hays, and later enlarged by Miller. The bust style and size of ornamentation, letters, or dates are not considered in this protocol. The reference for attributing this series is by Henry C. Miller, *The State Coinage of Connecticut*, repr. ed. (Wayland, MA, 1962) with enlargement by Edward R. Barnsley, "Miller's Connecticut Listings Updated," *CNL* 11 (1964), pp. 76-108.

[5] John Craig, *The Mint* (Cambridge, 1953), p. 174; C. Wilson Peck, *English Copper, Tin, and Bronze Coins in the British Museum* (London, 1960), p. 110.

[6] James C. Spilman, "Abel Buell—Our American Genius," *CNL* 34 (1972), pp. 352-55, 424-34; Kenneth Scott, *Counterfeiting in Colonial Connecticut*, ANSNNM 140 (New York, 1957) pp. 160-62.

[7] Breen, "Connecticut Mints," p. 119; Breen, *Encyclopedia*, no. 741.

[8] Breen's EAC catalogue is particularly helpful in the description of legend ornamentation.

[9] James C. Spilman, "An Experimental Die Analysis Chart for the Connecticut Coppers," *CNL* 48 (1977), pp. 572-77, 49 (1977), pp. 594-602, 51 (1978), pp. 630-34.

[10] Breen has estimated that about 3,500,000 Draped Bust Left coppers were minted between June 1787 and September 1788. These issues comprise about half of all the existing Connecticut coppers; a total original mintage of 7,000,000 from all sources seems probable ("Connecticut Mints," pp. 125-27, EAC, 25).

[11] Crosby (above, n. 3), p. 223.

[12] Breen, "Connecticut Mints," pp. 123-24, 131-33, and *Encyclopedia*, p. 65.

[13] 1788 Draped Bust Left varieties may have been minted by Jarvis and Co., Breen, *Encyclopedia*, pp. 77-78; Breen, "Connecticut Mints," p. 130.

[14] The subject of a presentation at the ANS by the author, "The Circulation of Coppers in Pre-Federal America: the Coppers Panic of 1789," the David M. Bullowa Memorial Lecture, ANS, September 22, 1990, and discussed in detail in Philip L. Mossman, *Money of the American Colonies and Confederation: A Numismatic, Economic and Historical Correlation*, ANSNS 20 (in press).

[15] See above, n. 14.

[16] The data and conclusions presented in this article update material published in *CNL* 84 (1990), TN-131, "Connecticut Revisited," pp. 1144-47. As long as the copper is not damaged, the condition, or mint state, does not significantly alter the coin's weight.

[17] There are 10 die combinations of these coppers and all are represented in this data base. The 38-GG, as a single variety, is the heaviest with six specimens averaging 156.1 gr.

[18] There are 25 varieties and all but one is represented in this sample.

[19] Breen, *Encyclopedia*, no. 805.

[20] Breen, *Encyclopedia*, no. 810.

[21] All but 11 varieties are represented in this data base.

[22] EAC, 20-21; Breen, *Encyclopedia*, nos. 775-76.

[23] Breen, *Encyclopedia*, no. 790.

[24] James C. Spilman, "An Overview of Early Coinage Technology," *CNL* 62 (1982)-64 (1983), passim, esp. p. 800; Breen, *Encyclopedia*, no. 146; see Damon Douglas, "James Jarvis and the Fugio Coppers," (ms. in the ANS Library), p. 63. In writing about the weight distribution curve for the Fugio cents, Douglas said, "...these variations resulted almost entirely from the lack of control in the thickness to which the copper was sheeted before cutting...."

[25] Craig (above, n. 5), p. 250; Eric P. Newman, *Coinage for Colonial Virginia*, ANSNNM 135 (New York, 1956), p. 52.

[26] The value of 8.84 g per cc is only used as an illustration; it is derived from the actual specific gravity measurements of several William III halfpence and is typical of contemporaneous coppers.

[27] Douglas (above, n. 24), p. 56.

[28] Breen has described the event which appears to coincide with the appearance of these first typically full weight coppers, i.e. the 1786 Draped Bust Left varieties, as the six week period starting September 10, 1786, when the Company for Coining Coppers leased their equipment to the group of Mark Leavenworth, Isaac Baldwin and William Leavenworth. This was a time when he Company for Coining Coppers had exhausted their supply of "stock." Was the technique of planchet production perfected at this time? See Breen, "Connecticut Mints," p. 122; Crosby (above, n. 3), p. 222.

[29] EAC, 26.

[30] EAC, 25-26. Breen noted in "Connecticut Coppers," p. 126, that some Jarvis coppers averaged 136 gr.

[31] James C. Spilman, "CNL Fugio Weight Survey Update," *CNL* 87 (1991), pp. 1236-40.

[31] James C. Spilman, "CNL Fugio Weight Survey Update," *CNL* 87 (1991), pp. 1236-40.

[32] Breen, *Encyclopedia*, nos. 866-68.

[33] Mossman (above, n. 14); an earlier version of this study appeared in *CNL* 74 (1986), see esp. pp. 147-61.

[34] See Breen, "Connecticut Coppers," for discussion of die emission sequence.

[35] Above, n. 24, p. 67.

# Ephraim Brasher's 1786 Lima Style Doubloon

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## Introduction

There are few early American coins that can rival the public celebrity enjoyed by Ephraim Brasher's New York style doubloons. The "Brasher Doubloon" has been featured in popular detective genre novels, on television dramas, and in motion pictures. It has become the archetype for the valuable coin in the public imagination. The appearance of a specimen at auction creates more publicity than any other coin offering, and the prices realized for Brasher doubloons far exceed those of rarer and more historically important coins. It is, perhaps, the most notorious of all early American issues, yet remains today one of the least studied.[1]

Another gold coin type which bears an "EB" counterstamp has been known for nearly a century, the so-called "Lima style" doubloon. Apart from a few auction catalogue descriptions of indifferent usefulness, and a report by the American Numismatic Society published in 1915, even less of value has been written about this putative Brasher product. Today, a seemingly more impenetrable aura of mystery surrounds the Lima style doubloon than the more familiar New York style type. It has attracted none of the public attention that has fastened upon the latter, and among serious collectors of early American coins little is known or understood about it.[2]

This study will examine and analyze the Lima style doubloon in some depth. The few prior references to the type will be examined, to place the present study into its proper historiographical context.[3] Minute descriptions of both obverse and reverse dies, together with their individual elements, including the "E.B" counterstamp, will be presented later. Finally, the paper will offer previously unpublished information about this issue, primarily of a technical nature, that may suggest something about it based more on scientific numismatic techniques than on the imprecise descriptions of its gross physical characteristics typical of earlier studies.

## Review of the Literature

The earliest published reference to the Lima style doubloon may be found in the description of lot 813 of Scott Stamp & Coin Company's auction of the "Paris" Collection, held on December 12, 1894, where the discovery specimen was catalogued as (fig. 1):

> 813. 1742 Lima, Peru, Gold 8 Escudos or Doubloon. L - .8. - V/P. - .V. - A/ 7 - .4. - .2 (which we read, Lima, 8 Escudos Value (Valor). Plus ultra Anno 1742) through two pillars in sea. Below, BRASHER. Rev., Cross, with

1. 1786 Brasher Lima Style doubloon.
The "Paris" Collection specimen, the discovery coin.
Photo: courtesy A.M. Kagin and J.J. Ford, Jr.

arms of Castile and Leon alternating in angles. Counterstamped E.B. in small oval on center of cross, same as on Ephraim Brasher's N.Y. Doubloon of 1787. Circle of dots around borders. Fine. Small scratches on rev. (Weight, 408 grains) Exceedingly rare Size 27

This was, to say the least, a somewhat laconic description, particularly the reference to the rarity of the coin, since no other was then known and this was the first time the type had been introduced to the numismatic public. Readings of the peripheral legends were not included, an important part of the Brasher signature was overlooked, and no attempt to contrast the piece with the regular Lima Mint doubloon of the period was made. In an era of auction cataloguing not usually known for its depth, Scott's description stands as an exemplar of understatement.

The "Paris" specimen appears to have attracted little attention at the time, and between 1894 and 1915 no further references to the newly discovered type are recorded. It seems largely to have been forgotten by collectors and serious numismatists, perhaps due to its extreme rarity. In fact, its very existence was later overlooked by every specialist in early American coins save one.

The Lima style doubloon was "rediscovered" late in 1914, when Waldo Newcomer acquired the second known specimen (fig. 2).

2. 1786 Brasher Lima Style doubloon.
The Newcomer-Garrett specimen, the finer of two known.
Photo: Garrett:2341, courtesy of Bowers and Merena.

Newcomer submitted the new specimen to the ANS for examination by the Committee on United States Coins. Comprised of William H. Woodin, Wayte Raymond, and Edgar H. Adams, the committee studied the piece and published its findings in 1914.[5] The report is worth quoting at length, since it was the earliest careful examination of the new type and has not been improved upon by later writers. After describing the circumstances of its "discovery," the report went on:

> On the obverse of the piece, around the border reads what seems to be PHILIP V. D. G. H. REX ANO 17 (00, or 80). In the center of the field, which is surrounded by a large circle of pearls, are two columns, representing the pillars of Hercules, each of which is surmounted by a fleur de lis. Above is a flowered ornament. In three lines, running across the columns, is the inscription L. 8. V. | P. V. A. | 7. 4. 2. Below the columns are four lines representing waves of the sea, and below these is the word BRASHER. Still further below, between D. G. and H. of inscription, are the letters N. Y. The reverse shows a cross of Jerusalem, quartered with castles and lions. In the center of the field is counterstamped E B. Around the border is inscribed HISPANIARUM ET IND REX. The piece weighs 409 3/4 grains.
>
> From a careful examination, it is certain that the whole coin design was entirely fabricated outside of any authorized Spanish mint, and the stamp of BRASHER N Y must have appeared in the original die, although the counterstamp E B was added after the piece had been struck, and seems to be exactly like the stamps of this assayer which have been examined on the various Brasher doubloons and other gold coins, usually of Spanish or Portuguese origin, which have appeared from time to time.[6]

The report went on to speculate about the origin of the newly "discovered" type, as well as the more familiar New York style Brasher gold coins, concluding that their existence suggested that Brasher operated a private mint that struck gold coins of the approximate weight of the then current Spanish 8 escudos. The authors very carefully avoided the appearance of authenticating the Lima style doubloon they studied, but left their readers with the distinct impression that they favored such a conclusion.[7]

One of the authors of the report, Adams, was not as circumspect when he recounted the "discovery" for the popular numismatic

press.[8] In what began as a reiteration of the ANS committee's report, Adams went on to assert that:

> Brasher very likely struck the goldpiece first described [i.e., the Lima style doubloon] for circulation in the American Colonies, rather than in the West Indies, and it may be that his issue of the Brasher New York Doubloon was suggested by the piece which has been acquired by Mr. Newcomer. Considering all that we know regarding these pieces, it would seem as if there was, after all, some plausibility to the theory that the New York Doubloon was actually intended to be circulated in the American Colonies at the value of a Spanish doubloon, as we had no gold currency of our own in 1787. The discovery of this goldpiece, bearing the name and address of Brasher, is undoubtedly one of the most important of late years, and will make American numismatists all the more eager to learn additional facts regarding the operations of America's first private gold coin maker.[9]

Adams clearly accepted the Lima style doubloon as Ephraim Brasher's handiwork, a conclusion he may have come to as a member of the ANS committee but been reluctant to publish as such. More importantly, Adams believed that the Lima style piece had been struck before the New York style issue, and that it somehow "suggested" the striking of the latter. He did not, however, pursue this possible emission sequence further. A rather simple means of testing such a conclusion will become an important feature of this present paper.

In 1922, B. Max Mehl offered the "Paris" Collection specimen as lot 375 of his sale of the James Ten Eyck Collection.[10] Although, as Lyman Haines Low had already pointed out, Mehl's was not the first auction description of the Lima type, it was the lengthiest, and incorporated sections of Adams's 1915 notice of the piece quoted above. Nothing further of an original nature was included in Mehl's masterful catalogue description, however, save for a suggestion that the date following ANO on the obverse might read 1703 (the ANS committee had earlier suggested readings of 1700 or 1780). John Work Garrett purchased the "Paris"-Ten Eyck coin, but later sold it back to Mehl in order to purchase from Mehl the Newcomer "discovery" specimen, the finer of the two.

Thirty-five years later, A.M. Kagin authored an impressionistic essay on the Lima style doubloon, apparently inspired both by his purchase of the "Paris"-Ten Eyck-Garrett-Mehl-Green specimen for a client, and by its first listing in the popular collectors' handbook,

the *Guidebook*.[11] Kagin's essay reprinted the earlier Mehl/Ten Eyck catalogue description, together with the story of Kagin's own attraction to Brasher's products, but also added something new.[12] Kagin suggested that Brasher cut the dies for the Lima style doubloon in 1792, while in the employ of the U. S. Mint as a freelance assayer, and that the 1742 date on the Lima issue was chosen to "correspond" with the then calendar date 1792. Kagin evidently overlooked the remnants of a second, different date on the obverse of the Lima style piece and discarded Mehl's suggestion of 1703 and the ANS committee's earlier readings of 1700 or 1780. However, no evidence of any but a subjective nature was offered for Kagin's 1792 dating of the type.

The Lima style doubloon was first listed in the 10th edition of the *Guidebook* (1957), and for the next three years following. It was listed finally in the 14th edition (1961), but now dated 1792-1742, apparently following Kagin's unsubstantiated earlier suggestion, and with the proviso "New evidence indicates that it may be a fabrication of a much later date."[13] Although the "evidence" referred to was not published, the Lima style doubloon was subsequently dropped from the listings in the 15th through 43rd editions (1962-90). In the most recent, 44th edition (as of this paper), a note about the type reads "A mystery also surrounds the origin and intent of the 1742 'Lima Style Doubloon,' which includes an E.B. counterstamp and the name Brasher."[14] In the most useful edition of the *Standard Catalogue of United States Coins*, originally published by Wayte Raymond, the Lima style doubloon was included under "Private Gold Issues" and linked to the New York style pieces, which were listed under "New York" issues.[15] In a wide-ranging study of the coin types he attributed to Brasher and John Bailey, Walter Breen implicitly accepted the Lima style doubloons as genuine products of Brasher's workshop, suggesting that Bailey may have been responsible either for the dies, or the punches used on them.[16] Breen offered no evidence for his conclusion that the Lima style doubloon was genuine, however, but did attempt to elaborate upon Adams's earlier suggestion that they may have been struck for local, American circulation.[17] He did not accept Adams's conclusion that the Lima style had been coined before the New York style. Breen referred, on the contrary, to the lesson of the type change in the Vermont copper series from landscape to bust, and suggested that, since the Lima type would have been more familiar to those lucky enough to encounter gold coins in circulation, it replaced the less familiar New York type as Brasher's answer to the debased, plugged gold medium then in infrequent use in New York City.[18]

Following Kagin's suggested dating of 1792, and Breen's proposed emission sequence, Lynn Glaser accepted the Lima style doubloon as a genuine Brasher product and wrote that it represented "...the first instance of imitation of Spanish coinage in the United States."[19] Don Taxay did not list the Lima style doubloon in either edition of his still valuable survey of United States coins, but did include both types of the New York style and the unique New York style half-doubloon.[20]

The Newcomer-Mehl-Garrett specimen was sold as lot 2341 in Bowers and Ruddy's March 1981 auction.[21] The catalogue description of the piece indicated that it had been tested for metallic content at the "Applied Physics Laboratory" and the National Bureau of Standards, and that the findings showed its composition to be "...nearly pure gold with a small percentage of silver (as an impurity) plus insignificant traces of other metals."[22] Specific details of the test results were not included, however, and were not later published separately. No other information was provided in the description that did not echo the opinions of Adams, Mehl or Breen, and that the firm offered this specimen on an "As is" basis suggests that it was not altogether comfortable with either the analytical results or the coin's presumed authenticity.

To commemorate the bicentennial of the New York style doubloon's date, David T. Alexander surveyed the gold coin types attributed to Brasher's hand.[23] While not specifically accepting Breen's earlier proposed emission sequence, Adams's suggested sequence was not mentioned, leaving the reader to suppose that the Breen sequence was the sole explanation for the striking of the two very different types. Alexander referred to the analytical tests done on the Garrett New York and Lima style doubloons six years earlier, and argued that because the metallic contents were the "same," both types must necessarily be "fabrications of a much later date" or both must be genuine.[24] He concluded by stating "The scientific evidence strongly suggests that both types of doubloon were struck by Ephraim Brasher in 1787," echoing Breen's dating, discarding Kagin's date of 1792, and overlooking the suggestions offered by the ANS committee and Mehl of remnants of another date on the piece.[25] Breen repeated his earlier opinions about the Lima style doubloon in his *Encyclopedia*, underlining his proposed emission sequence of New York style first, Lima style following, and tentatively dated it 1787.[26] Taxay's 1971 catalogue served as the basis for a new survey of U. S. and related coins edited by Alexander and Thomas K. Delorey in 1990.[27] The editors repeated the generalizations made by one of them in 1987, and by the Garrett cataloguers

in 1981, regarding the metallic analyses made on the New York and Lima style doubloons, but by 1990 had no hesitancy in accepting the latter as a genuine Brasher product. While the Garrett cataloguers stated that the metallic analyses of the two showed them to be "virtually identical," the word "virtually" was omitted from this new characterization of the test results.[28] More importantly, a reference was included that seemed to prove the authenticity of the Lima style doubloon beyond any shadow of a doubt.

Alexander and Delorey stated that "Through exacting photo overlay analysis, numismatist John J. Ford, Jr. showed that the Lima coin's EB punch was identical to that of the New York pieces, but in an earlier state of wear, proving the Lima style pieces to have been struck before the New York issues."[29] Unfortunately, the editors did not provide any references as to when such identity had been established, where the narrative results of the photo overlay analysis had been published, or to whom Ford had shown the necessary film prints.[30] That controversy still surrounds the authenticity of the Lima style doubloons suggests that such definitive evidence has not been widely disseminated, if at all.

From the foregoing, it is clear that the Lima style doubloons have not enjoyed the same general acceptance as have the more familiar New York style pieces. From the discovery of the first specimen in 1894, until the type's authenticity was challenged in 1961, the general consensus of opinion favored the Lima style as a genuine product of Ephraim Brasher's workshop, even if its purpose and timing were unsettled.[31] After 1962, the type was no longer carried in the popular handbooks until 1990, when an equivocal listing appeared in one and a less than reliable acceptance in another. Although the evidence offered against the Lima style doubloon in 1961 has never been published, proponents for and against its authenticity appear to have adopted a partisanship that is not gentle with the numismatic facts.

The emission sequence of the New York and Lima style doubloons has also been unsettled recently. Adams, who accepted the Lima style pieces without hesitation, believed in 1915 that they had been struck before the New York style doubloons. Kagin suggested a much later date, without sound basis. Breen posited in 1958 that the Lima style was struck after the New York style, and repeated his assertion in 1988. Alexander and DeLorey's note in 1990 regarding the photographic overlay analysis seemed to mark a return to Adams's earlier sequence, but if the evidence were to be accepted, on a much sounder basis than before.

Only on one point do all the published accounts of the Lima style

agree. All previous writers have adopted Adams's opinion that the Lima style, as well as the New York style pieces, were made for local, New York and environs, circulation, and not for export to the West Indies or elsewhere.[32] Clearly, it is time to reevaluate the evidence pro and con the Lima style doubloon's authenticity, and to do so in as impartial a fashion as is possible, avoiding the partisan enthusiasm of its supporters and the regrettable silence of its opponents. There is a considerable body of evidence about the Lima style doubloon which has been alluded to in various of the sources noted above, but which has never been published in an open forum, subject to scrutiny and challenge. There is an even larger, unpublished body of technical information which has only recently been evaluated. The Lima style doubloons are a far more interesting, indeed, curious, coinage than has been suspected before. The type's stylistic intricacies, method of manufacture, dating, even the correct reading of its legends, all the truly important features of concern to the numismatist, have been overlooked since its discovery. It is the author's expectation that the conclusions of this study will be seen as an effort toward a better grounded understanding of a coinage which has unfortunately become a pawn in a factious dispute.

## Types and Die Characteristics

The gross physical characteristics of the Lima style doubloon have never been thoroughly and accurately published, despite the apparent care taken by the authors of the 1914 ANS committee report. This oversight extends even to the simple transliteration of the legends, particularly the reverse's. In addition, the style of letter and numeral punches on both sides has not been described. The "E.B" counterstamp has been claimed as identical to that found on the New York style doubloons, but the evidence for this assertion has not been published.

Although two specimens are known, only one, the Newcomer-Garrett coin, is well-enough preserved to offer legible peripheral inscriptions. The other, the original discovery piece, lacks peripheral legends although the central devices on both sides are complete. Since they are both from the same dies, the descriptions that follow are based upon examination of the Newcomer-Garrett specimen but apply equally well to the other.

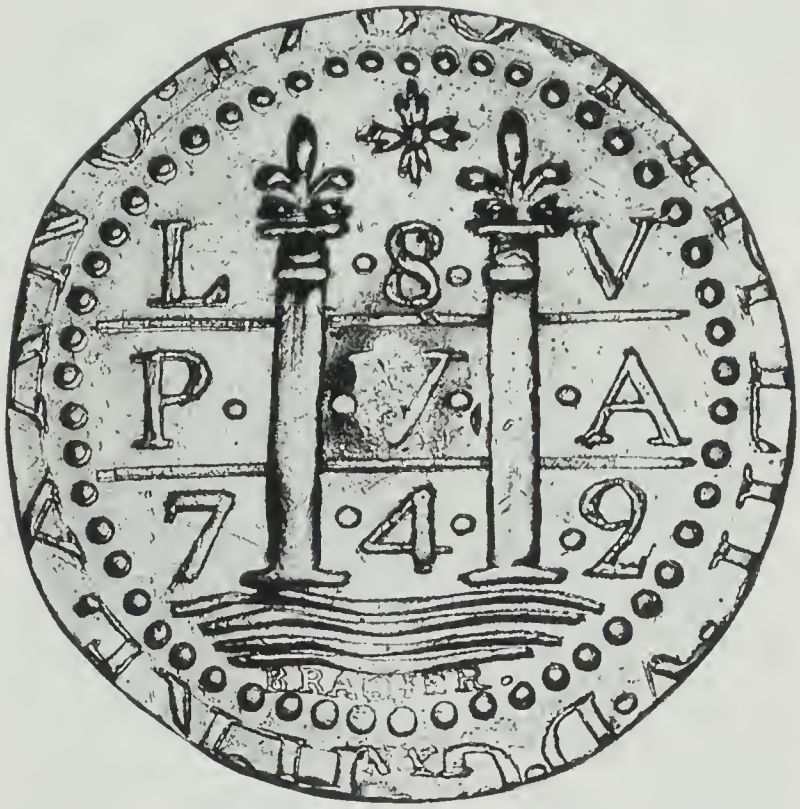
The apparent prototype for the Lima style doubloon was a 1742 dated Spanish colonial 8 escudos piece (fig. 3). While the general types of both are quite similar, they differ in several important details. The obverse of the prototype bears the Jerusalem cross, or

3. 1742 Spanish colonial Lima Mint 8 escudos.
The prototype for the 1786 Brasher Lima Style doubloon.
Photo: courtesy of ANS.

cross potent. On the Lima style doubloon, this form was altered to that of a cross potent-rebated, with part of the crutch removed from each limb. Other obverse design details are essentially the same on each.[33] The pillars of Hercules on the reverse of the prototype are tapered, with small capitals topped by ornaments variously resembling acanthus leaves copied from the Corinthian order or large floral shapes. The pillars engage the waves, below. Above is found either a crown, or a crowned cruciform shape. On the Lima style, the pillars are more square in cross section, and bear flat capitals modeled after the Doric order, each of which is capped by a fleur-de-lys. Above the pillars is a cross fleury. The pillars are free-standing upon flat bases and do not engage the waves, below.

One major design difference would have served to distinguish for contemporaries the prototype from the Lima style at a first glance. The obverse of the prototype, the side bearing the royal name, was always the side with the Jerusalem cross; the pillars side bore the two dates (central and peripheral) and the continuation of the royal titulature. The Lima style doubloon bears the royal name on the pillars side, while the cross side bears the continuation of the titulature, directly opposite to the required style of the prototype. The Lima style doubloon does not appear to have been a slavish copy from its prototype. The substitution of a cross fleury for the expected Spanish element is another difference that would have been immediately noticeable to a contemporary familiar with the usual appearance of the prototype.[34]

The inscriptions on the obverse die cut for the Lima style doubloon were created from three different punch sets (fig. 4). The peripheral letters were made from a single letter punch set, while the central letters and numerals were from another, larger, punch set. The numeral 2 has an entirely different appearance from the other central numerals and appears to have been hand-engraved onto the die face, rather than being punched into it. The Brasher signature

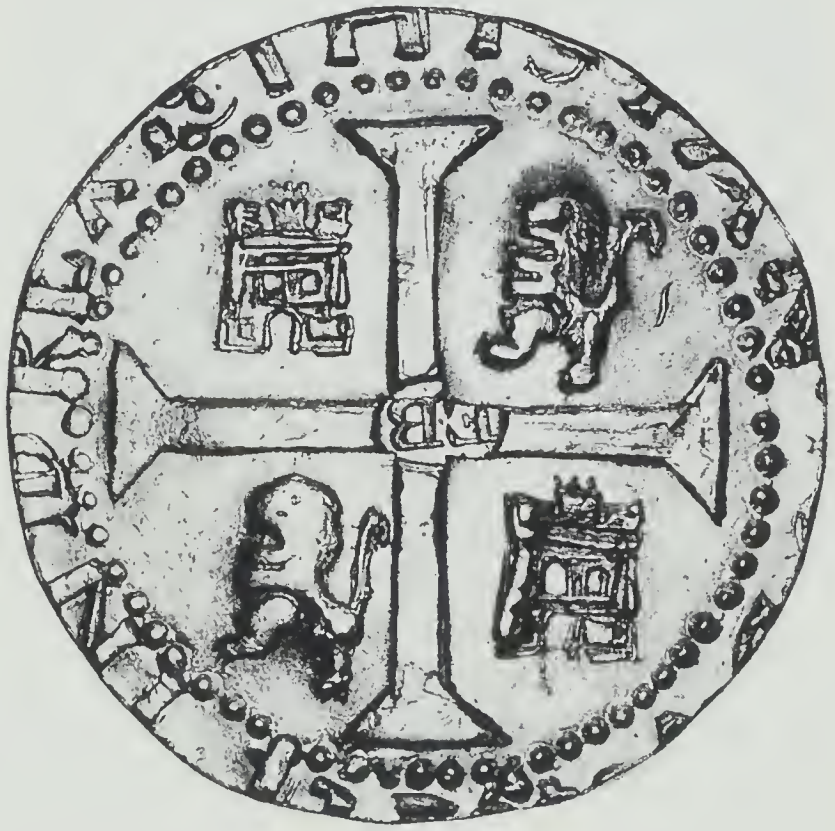



4. 1786 Brasher Lima Style doubloon. Obverse (enlarged).
Photo: Garrett:2341, courtesy Bowers and Merena.

near the bottom of the die was from the third set, the smallest used, and was added after the beaded circle and waves had been drawn onto the die. They are from a different punch set than used for the Brasher signature found on the New York style doubloons. The letters N.Y at the base of the die face were hand engraved, not punched, and overlie the scribed circle on which the peripheral letters rest, indicating that they were added after most of the design had been completed. It should be noted that an address does not seem to appear as an element of the design of the New York style doubloons, although there are suggestions of a "N.Y" at the base of Garrett:607.

The peripheral inscription was anchored onto an outer scribed circle, which was drawn around the die face twice. The spacing and shapes of the inner circle of large beads indicates that it was hand punched using a single element punch and not a gang punch composed of two or more beads. The two pillars, their fleur-de-lys decorations, the cross fleury between them, the lines on which they are superimposed, and the wavy lines below, were all hand engraved onto the die.

The obverse die, then, was created by using a combination of three punch sets for the letters and numerals, while other elements were hand engraved. There are clear signs of doubling visible on the obverse, the result of the planchet having been struck twice, the second time shifted by about 2% on a west-northwest vector.[35] The bases of the letters in PHILIP show what has been called bifurcation, the result of inadequate draft allowed on the highest points of the punches used.



5. 1786 Brasher Lima Style doubloon. Reverse (enlarged).
Photo: Garrett:2341, courtesy Bowers and Merena.

The reverse presents an entirely different picture, and is one of the curious features of the type not noticed before (fig. 5). All letters and the four numerals in the peripheral inscription were hand engraved onto the die face, as were the Jerusalem cross and the elements of the Leon and Castile arms. No punches were used to create this die, which has a very crude appearance quite unlike the more finished obverse. It is entirely likely that the reverse was made by a different hand than was responsible for the obverse. Numerous mistakes by the engraver can be seen, such as the failure adequately to remove the remnants of the misplaced battlements in the second quarter of the arms, the scratch from the field in the first, the scratch below the castle in the third, and the traces of a stray ornamental

element from the crude rosette which ends the inscription. There are faintly visible signs of double striking, most noticeable around the bases of some peripheral letters.

In the center of the reverse, at the juncture of the arms of the Jerusalem cross, is the "E.B" counterstamp. The counterstamp was applied with a single blow from a prepared punch. On the "Paris" Collection-Ten Eyck-Kagin specimen, the punch was entered correctly orientated so that the letters EB were in their normal alignment when that side of the coin is viewed. On the Newcomer-Garrett specimen, however, the "E.B" punch was entered upside-down in relation to the normal orientation of the design, and the coin must be rotated 180° to read the letters correctly. Due to the design of the host, and the placement of the counterstamp over the raised arms of the cross, neither of the two Lima style doubloons presents a completely visible impression of the "E.B" punch. On the Kagin specimen the lower left downstroke and serif of the E, as well as the upper edge of that letter's first cross stroke, are obscure. The letter B, however, is complete. On the Garrett coin, the bottom third of the downstroke and the entire length of the bottom cross stroke of E are obscure. The upper two thirds of that letter are complete, however, as is all of the neighboring B.

The edge of the Garrett specimen is rough and irregular, suggestive of having been struck on a cast flan. Its cross section would appear squared-off rather than rounded, more like British late eighteenth century coins than contemporary American ones. No evidence of the use of a collar remains. The edge was not filed, and shows no signs of any alteration after striking, such as clipping.

The Kagin specimen lacks any vestiges of the peripheral inscription. The Garrett coin's inscription is about 50% off flan. The weights of both are nearly identical, (Garrett specimen: 407.5 gr; Kagin specimen: 407.3 gr), but the latter appears to have been struck on a thicker flan. On the Garrett specimen, the peripheral letters run off the flan, and it is clear that the dies were broader than the flans they struck. This is another curious feature of the Lima style doubloon, and suggests either that the coiner's intention was deliberately to create an issue that lacked complete legends, or that he misjudged the diameters of the dies when preparing his planchets.

The inscriptions on both sides have always been inaccurately transcribed since the discovery of the type. The closest reading was the 1914 ANS committee's, but the authors of that report incorrectly recorded the reverse legend. An accurate reading of both legends underscores the curious nature of the type.

The obverse peripheral inscription reads: • PHILIP • V • D • G

• H • REX ANO 1786. The central inscription was accurately described in the 1914 ANS report, and need not be repeated here. This inscription is very similar to the prototype's, which would have read PHILIPPVS V D. G. HISPAN, with varying styles of punctuation. The reverse of the Lima style type is inscribed I HISPAN [followed by vestiges of other letters and the upper elements of four numerals representing another date, all too far off flan for a sound reading] IND REX, the inscription ending with a clumsy floral ornament. The letters between N and the second I are so far off the flan as to be entirely illegible. The reverse inscription needlessly repeats the Spanish title found on the obverse in an abbreviated form, another of the curious features of the Lima style doubloon. The reading suggested by the authors of the 1914 ANS committee report is not supported by the evidence of the coin. On the prototype, the inscription would have read ET INDIARVM REX, continuing the obverse titulature, ending with a date composed of four numerals.

The prototype Lima mint 8 escudos of Philip V's reign were generally rounded, but with extremely irregular edges and imperfect centering of the die faces over the flans, resulting in coins whose inscriptions were, for the most part, partially off flan. The layout of the Lima style dies, with their own legends partially off flan, strongly suggests a deliberate attempt to duplicate the gross physical appearance of the prototype, and not a failure to match the diameters of the dies and flan.

The obverse date of 1786 on the Lima style doubloon has not been noticed before. The authors of the 1914 ANS committee report believed that the date was either 1700 or 1780, while Mehl ventured a reading of 1703. The identity of the first two numerals is agreed upon by all previous writers, given the vectors of the strokes of those numbers. The third numeral shows a closed loop composed of two parts, each equally wide, whose vectors describe a circle of evenly decreasing circumference. The fourth numeral's closed loop is wider on the right than the left, but is wider in diameter than the third's. The only possible candidate for the third is a numeral half of whose shape includes a closed loop with design elements of the required vector and thickness, eliminating all but 8 as possible choices. It may be remembered that this reading was one of the two suggested by the ANS in 1914. The fourth numeral, similarly, can only have been 6, given the varying thickness and apparent vector of the visible stroke. The thickness of the strokes with which it was drawn are too narrow on the left to accommodate the shape of a "0," and a reading of "2," "3" or "5" is ruled out by the loop's obvious closure on the left. All numerals composed of

straight line elements, such as "1," "4," "7" and "9," are clearly impossible as candidates. Of the remaining two numerical choices, "8" is eliminated by the width of the visible loop and comparison with the vectors of the strokes in the third number of the date, leaving "6" as the only logical choice.

## Metrology and Elemental Analysis

The metrology of the Lima style doubloon has never been examined, but rather than being an academic numismatic exercise, an analysis of the technical parameters of the type, with reference to the metrologies of both Spanish colonial gold and the New York style doubloon, can serve to place it into the context originally intended for it by its maker, be he Ephraim Brasher or a later counterfeiter. The "Paris" Collection-Kagin specimen weighs 407.3 gr, while the Newcomer-Garrett example weighs 407.5. The mean weight of six of the seven known New York style doubloons is 408.8 gr.[36] The weights observed from the New York style doubloons range from 406.8 to 411.5 gr, with a first standard deviation of 1.9 gr which is low, but probably not unexpected on a private gold coinage. While falling in the low side, the observed weights of the two Lima style doubloons are within the range discovered for the New York style type.

Weights of specimens of the 1742 prototype for the Lima style doubloon are infrequently recorded. However, some data from contemporary Lima mint 8 escudos is available for comparison with the above observations: 1720, 413.2 gr; 172-(last digit off flan), 415.9 gr; 1729, 416.7 gr; 1740, 414.4 gr; 1743, 414.5 gr and 1746, 416.9 gr.[37] The mean weight of this sample is 415.3 gr, with a first standard deviation of 1.5 gr.

The New York style doubloons appear to have been struck to a weight standard close to, but slightly below, that observed from the sample of contemporary Spanish colonial 8 escudos specimens. The difference between the means of the former and latter is only 6.5 gr, a measurable amount under controlled conditions but probably negligible for late eighteenth century New York City banking purposes. For example, the schedule of expected weights and corresponding values in New York currency and British sterling, published by the Bank of New York in 1786, called for a Spanish doubloon to weigh 17 dwt, 0 gr, equivalent to 408.0 gr.[38]

The Lima style doubloons, similarly, are close in weight to the mean of the Lima Mint sample's, but lower still than the New York style's. If a true weight standard can be discovered from the Lima style doubloons, it corresponds closely to that of the New York style,

which, in turn, corresponded to the standard employed at the Lima Mint, itself. More interestingly, it is just sixth-tenths of a grain below the expected weight of a Spanish doubloon published by the Bank of New York in 1786, and it will be remembered that the Lima style doubloons are dated 1786. It is more than likely, therefore, that the choice of the Spanish colonial Lima Mint type as the prototype is linked to the close approximation of that mint's apparent weight standard.

The Garrett sale cataloguers referred to metallic analyses made on a New York style doubloon and the Lima style piece offered in that sale, but did not publish them beyond saying they were virtually identical. These tests were carried out in facilities at The Johns Hopkins University and the National Bureau of Standards, and were conducted for Bowers and Ruddy Galleries, Inc., prior to the sale of Part 4 of the Garrett Collection in March 1981. Test procedures included x-ray emission spectrographic analysis via SEM, equipped to detect Auger electron emission as a control check on x-ray emission results and calibrated against standard dental gold.[39] Seven years later, in March 1988, in connection with an investigation of the Brasher half-doubloon conserved at the National Numismatic Collection, elemental probe scan analyses of that coin, together with the New York style doubloon preserved there and a U. S. 1885 half eagle, were made by Joseph N. Nelen, chemist in the Smithsonian's Department of Mineral Sciences. A brief note of the results of these tests appeared later in the popular numismatic press.[40] Finally, energy dispersive x-ray analysis tests on three mid-eighteenth century Mexico City Mint 8 escudos coins were carried out for the Boston Museum of Fine Arts in July 1975.[41] The elemental analytical results of all three test sessions are combined and summarized here (Table 1). They suggest several interesting conclusions about the composition of the New York and Lima style doubloons, especially when compared with contemporary Spanish colonial issues.

The percentages of content readings for gold and iron in all the tested coins were closely equivalent. The readings for silver and copper content, on the other hand, show clear distinctions among the three groups of coins tested. The silver contents of the New York and Lima style pieces were considerably higher than the readings taken from the standard $5 U. S. gold piece, but significantly lower, by approximately one-half, than those detected in the three Spanish colonial gold coins. Conversely, the copper content readings from the New York and Lima style coins were lower than those found in the U. S. half eagle, but approximately twice those read from the

**Table 1**

ELEMENTAL ANALYSIS

| *Specimen* | *AV%* | *AR%* | *CU%* | *Fe%* |
|---|---|---|---|---|
| Lima style (G:2341)[a] | 90.2 | 5.3 | 3.0 | under 1.0 |
| NY style (G:2340) | 89.3 | 6.4 | 3.0 | under 1.0 |
| NY style (SI)[b] | 84.5-93.9 | 3.81-5.24 | .97-2.75 | 0-.03 |
| NY style 1/2 (SI) | 86.8-93.4 | 4.1-6.1 | .96-3.0 | 0-.78 |
| 1743Mo 8 escudos | 88.0 | 10.45 | 1.5 | under 1.0 |
| 1744Mo 8 escudos | 91.2 | 7.3 | 1.5 | under 1.0 |
| 1745Mo 8 escudos | 89.5 | 8.4 | 2.1 | under 1.0 |
| 1885 $5 | 89.3 | 1.8 | 8.8 | under 1.0 |

[a] The provenance of each of the Lima and New York style specimens tested is given in parentheses.

[b] Readings on the two specimens from the National Numismatic Collection (Smithsonian Institution) are indicated by low/high ranges for gold, silver, and copper contents.

Mexico City Mint products.

It is clear from the foregoing that the gold and alloy melts used for the planchet stock for the New York and Lima style doubloons were, as the Garrett cataloguers described, "virtually identical."[42] It is also clear that the melts were entirely dissimilar to any of the standards required for United States gold coins of any date. Finally, the melts, with their lower silver and higher copper contents, are quite different from those used for the planchet stock of contemporary Mexican colonial gold issues. The conclusion is inescapable, therefore, that neither standard U. S. gold, nor unrefined Spanish colonial gold, served as the source for the planchet stocks used on the New York or Lima style doubloons. Although no trace of an undertype has ever been detected beneath them, it has been suggested that the New York style doubloons were struck over rolled out or planed down 8 escudos hosts. This may now be ruled out. It appears, on the contrary, that the planchet stock used for the New York and Lima style pieces was either obtained from another source, or was the result of refining Spanish colonial gold for silver recovery, following which additional copper was added for tensile strength.

## The E.B Counterstamp

The authors of the 1914 ANS committee report believed that the "E.B" counterstamp appearing on the reverse of the Lima style doubloon was the same as Ephraim Brasher's E.B touchmark applied to the New York style pieces. They were careful, however, to state that "...the counterstamp EB...seems to be exactly like the stamps of this assayer which have been examined on the various Brasher doubloons...," hardly an unequivocal assertion of the identity of the two.[43] Adams, on the other hand, who was one of the troika of authors of the report, definitely accepted the two punches as the same.[44] All other published accounts agreed with Adams's opinion until the statement which appeared in the 14th edition of the

**Table 2**

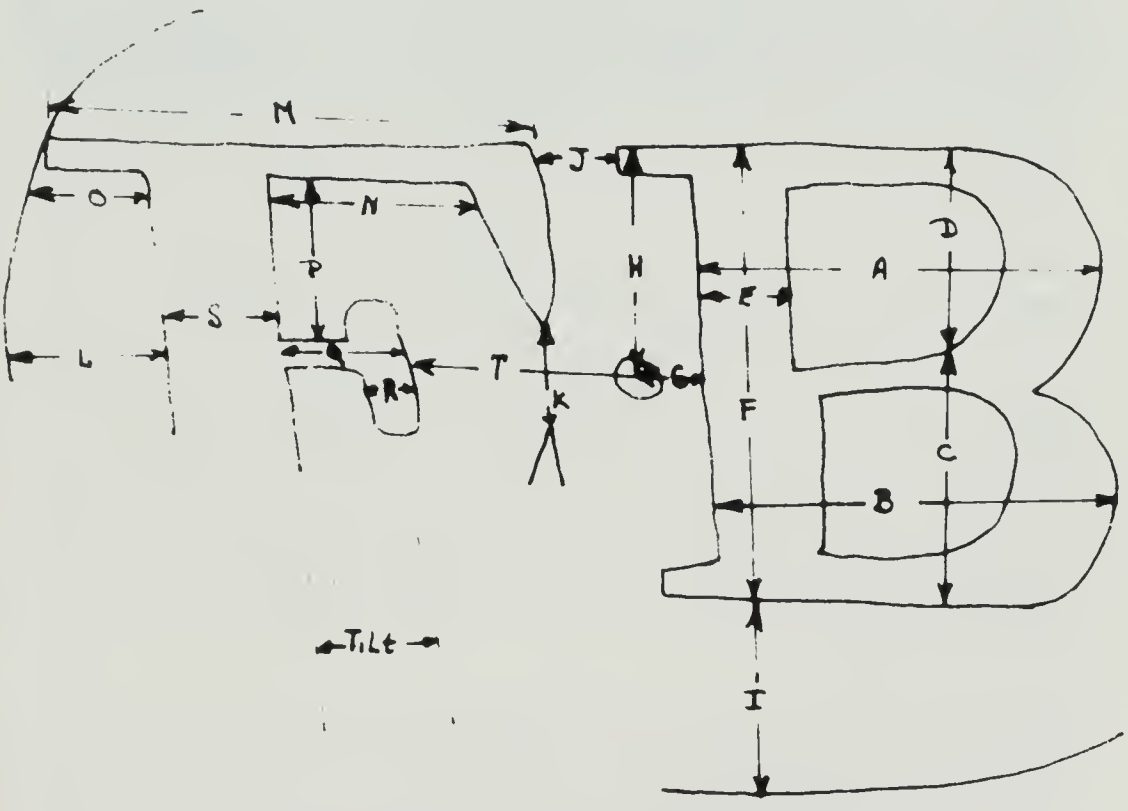
DIMENSIONAL MEASUREMENTS OF THE GARRETT LIMA STYLE DOUBLOON[a]

| *Dimension* | *New York Style E.B* | *Lima Style "E.B"* |
|---|---|---|
| A | 0.416 | 0.378 |
| B | 0.416 | 0.427 |
| C | 0.227 | 0.227 |
| D | 0.227 | 0.227 |
| E | 0.106 | 0.087 |
| F | 0.454 | 0.465 |
| G | 0.053 | 0.068 |
| H | 0.234 | 0.226 |
| I | 0.181 | 0.166 |
| J | 0.038 | 0.060 |
| K | 0.106 | 0.083 |
| L | 0.181 | 0.181 |
| M | 0.499 | 0.472 |
| N | 0.174 | 0.189 |
| O | 0.129 | 0.132 |
| P | 0.144 | 0.159 |
| Q | 0.129 | 0.129 |
| R | 0.053 | 0.045 |
| S | 0.106 | 0.098 |
| T | 0.204 | 0.212 |

[a] All measurements are given in decimal inches, as in the original report.

*Guidebook*, which amounted to a reversal of prior opinion about the authenticity of the "E.B" counterstamp. Unsubstantiated reports of photographic overlay analysis published in 1990 did little to rehabilitate the Lima style doubloon.

As part of the testing conducted on the New York and Lima style doubloons carried out at The Johns Hopkins University and the National Bureau of Standards, SEM micrographs of the "E.B" punch on the Lima style coin and the E.B punch on a New York doubloon were made at 33.6 diameters enlargement, for comparative purposes. A total of 20 individual measurements were made along the identical portions of each punch, and then compared for evidence of linear equivalence. These readings (Table 2), together with their interpretive key (fig. 6), are published here for the first time.




6. Dimensional key to SEM micrograph measurements.
Photo: courtesy The Johns Hopkins University and J.J. Ford, Jr.

In four cases, the measurements of both punches were found to be identical. These were dimensions C, D, L and Q, representing the total height of the letter "B," the distance from the extreme left edge of the oval depression to the extreme left edge of the downstroke of "E," and the length of the central cross stroke of "E." In eight cases, the measurements taken from the Lima style

punch were larger than those taken from the New York style piece. These differences ranged from 0.008-0.022″, with a mean of 0.012″. Similarly, in eight cases the Lima style's "E.B" measurements were smaller than those taken from the New York style's punch. These differences ranged from 0.008-0.038″, with a mean of 0.018″. Smaller and larger measurements were not confined to either one or the other letter, but were evenly distributed between the two.

The means of the differences noted above are equivalent to less than half a millimeter in each case, which, while perhaps significant, is so minute as to be nearly negligible. In fact, the authors of the Johns Hopkins report stated "The agreement between these measurements strongly suggests that they were made with the same punch and differences are due to differential wear and differential impression." The tilt of the first letter of each punch was also measured, yielding results of 5° for the New York style E.B, 6° for the Lima style "E.B." This close equivalence further supports the conclusion that both punches are identical, since the tilt corresponds to the way the original punch was laid out when made by or for Brasher.

As part of the analysis of the counterstamp undertaken for this present paper, identically sized film prints of the E.B punches appearing on a New York style and the Garrett Lima style doubloons were made. These were then overlaid atop each other, for visual examination and to test the dimensional results described in the Johns Hopkins report.[45] Additionally, macro photographs were made of the punch elements, for further comparative purposes. The results of the photographic overlay examination confirmed those described earlier by the Johns Hopkins evaluators. The E.B counterstamp on both the New York and Lima style doubloons is identical, and if the former's was Ephraim Brasher's touchmark, then so was the latter's.

A particularly interesting confirmation of this identity between the two E.B punches may be seen in the macro photographs of two of the Garrett Brasher doubloons. This feature, first noticed by Ford in 1982, also serves to confirm Adams's earlier belief that the Lima style pre-dated the New York style doubloon.[46]

The punch appearing on Garrett:607, the New York style, shows clear evidence of rusting (fig. 7). This is most noticeable directly above the downstroke of the E, in the space between the top serif of the central cross stroke and the middle of the bottom edge of the upper cross stroke of that letter, and in the field above the B, just before the initial curve of that letter. The first is a single rust mark, which describes a nearly triangular shape lying along a

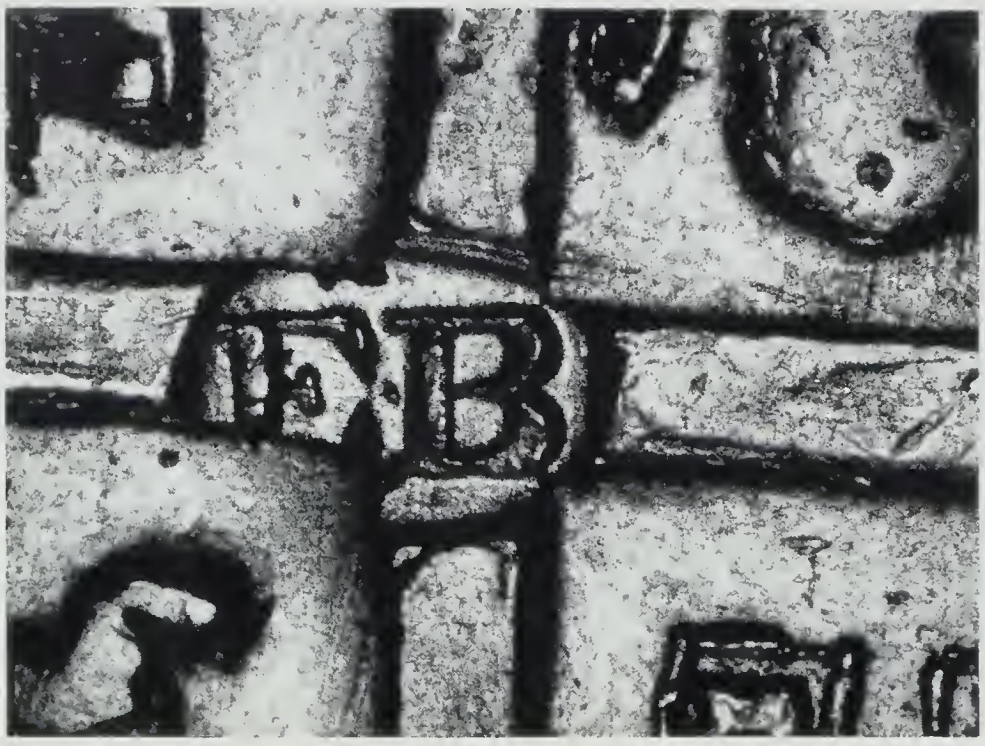
7. Enlargement of Ephraim Brasher's touchmark, appearing on the eagle's wing on the date side of Garrett:607, the finest known New York Style doubloon. Photo: courtesy of Bowers and Merena.

diagonal vector. The second is composed of a cluster of three roughly oval rust spots, while the third largely resembles the first in shape, but lies along a diagonal apposite to the first's.

These three areas of rusting appear in identical states of development on other New York style doubloons, such as the Yale University, RARCOA-Perschke, and National Numismatic Collection specimens. The unique punch on breast example, Garrett:2340, shows the first and third of the above described rust spots, but only one of the cluster of three in the E, indicating that it had been counterstamped before most of the surviving specimens known today.

The unique half doubloon, conserved at the National Numismatic Collection, shows all three areas of rust described, but with additional signs of rusting on the field of the punch and two larger areas of rusting above the top of the first cross stroke of the E, indicating that it had been counterstamped after all the known New York style pieces had received the punch.

The Newcomer-Garrett Lima style doubloon, the best preserved of the two specimens known, clearly shows the first rust spot described above, but in an earlier stage of development than seen on any known New York style piece (fig. 8). Additionally, the third area of rust is present, but also in a much earlier stage of growth. There are no signs of the second, the cluster of rust spots, on this



8. Enlargement of Ephraim Brasher's touchmark, appearing on the reverse of Garrett:2341, the finer of the two known Lima Style doubloons.
Photo: courtesy of Bowers and Merena.

example of the Lima style doubloon. The discovery specimen, the "Paris" Collection-Kagin coin, shows the third rust spot as seen on most of the New York style pieces, but none of the cluster of spots inside the E. Since its punch was entered with the top of the E above the juncture of the edge of the Jerusalem cross and the table of the coin, that portion of the letter was not impressed on the coin and it is unknown whether the first rust spot described above was present. Given the presence of the third, and the absence of the second, it is likely that the first was present and that the punch was in the same condition as when it was applied to the Newcomer-Garrett specimen.

It is clear, therefore, that the Lima style doubloons were counterstamped with the same E.B punch that was impressed into the New York style doubloons and the unique half doubloon. The state of the punch, however, shows that the Lima style pieces were counterstamped before the New York style coins, and thus pre-dated them, an observation borne out by the dates which appear on the two, 1786 on the former, 1787 on the latter. There is evidence for an emission sequence in these observations for the entire class of E.B counterstamped coins, with the Lima style first, followed by the punch on breast variety of the New York style, the "regular"

punch on wing variety, ending with the unique half doubloon.

The myriad English, Spanish, and Portuguese gold coins bearing an "E.B" counterstamp are not within the interest of this paper. It should be said, however, that those with a genuine Ephraim Brasher touchmark deserve study, since they might be fitted into the punch emission sequence and so provide a better understanding of the course of Brasher's activities as a private assayer. The presence of the die rust spots noted above would, in addition, serve as a rather simple means of authentication of any purported "E.B" punch.[47]

## Conclusion

The 1786 Lima style doubloon appears to be a genuine product of Ephraim Brasher's New York workshop, given the identity of the E.B touchmark and the virtual identity of their alloys. Neither was struck on cut down or rolled out Spanish colonial gold coins, but refined Latin American gold may probably have been the source for their planchet stock. Both were struck to a close approximation of the Spanish colonial weight standard for the 8 escudos denomination. The weights of the two known Lima style doubloons are essentially identical to the required weight of a Spanish colonial 8 escudos piece called for by the Bank of New York and the New York City Chamber of Commerce in a notice dated 1786.

Adams originally suggested that the Lima and New York style doubloons were struck for local, American, circulation purposes, and this hypothesis has been accepted by all who have publicly written on the subject.[48] Assuming him to have been correct, the questions of specific circulation patterns and purposes arise. A privately issued gold coinage would have been an expensive and somewhat risky affair, given the limited usefulness of the gold medium in daily commerce. In this respect, Brasher's coinage does not resemble John Chalmers's silver issues of 1783. Silver coins were far more current in small trade than were gold, and although Chalmers's issues were not intrinsically up to standard, their original purpose had been a pro bono publico one.[49] Brasher's gold issues, with their high intrinsic values, probably never entered normal, public commerce. Rather, they would have been confined to serving the needs of large transactions between the better-off merchants of the city, and, perhaps, colonial banks. It has been suggested that Brasher may have struck his doubloons for the Bank of New York, to supply a gold coinage of known weight and fineness, attested to by a gold and silversmith of known repute.[50] Alternatively, others have suggested that Brasher's doubloons represent his assay and refining of lightweight gold coins taken from circulation, effected under the

auspices of a New York financial institution, and point to Brasher's activities in 1792 on behalf of the nascent United States Mint as a parallel.[51] Neither hypothesis is supported by the evidence known today, although each is plausible.

There are several other mysteries remaining about Brasher's Lima style doubloon, technical numismatic ones that may never be adequately explained. The presence of two different hands on the dies is especially curious, particularly when the relative professionalism of the obverse is contrasted with the naive, untutored appearance of the reverse.[52] Since the E.B counterstamp obscures the central portion of the reverses of both known Lima style doubloons, it is certain that the obverse and reverse dies were contemporary with each other, and more importantly, with Brasher's activities as an assayer. The state of the rust in the punch shows that it was applied to the Lima style doubloons before it was impressed into the New York style ones. Therefore, both Lima style dies existed contemporaneously with those cut for the New York style doubloon. The naively drawn reverse, in other words, could not have been a concoction made many years later, as a mate for an unmarried obverse, since it shows the impression of a punch applied in its earliest known state.

Although arguments based upon observations of style are among the least sound in numismatics, the obverse of the Lima Style doubloon does seem to resemble Brasher's style visible on the New York doubloon, while the reverse is unworthy of such an attribution. It is barely conceivable that Brasher's obverse was clandestinely mated with a reverse by a hand entirely unconnected to Brasher's workshop, but given the sound weight and fineness of the Lima Style doubloons, the motive for such extracurricular activity is obscure. There certainly would have been little or no profit in making the Lima Style doubloons. Perhaps the reverse was entrusted to an apprentice through necessity, and the crudity of his work and Brasher's dissatisfaction with it accounts for the rarity of the issue compared to the number of New York doubloons known to have survived.

Brasher, like other contemporaries, often signed his name and city address on silver, but none of the New York doubloons seems to show "N.Y" beneath his signature.[53] Why did he feel the need to put his address on the Lima style pieces, but not on the later, New York style, coins? Perhaps the Lima style was expected occasionally to circulate outside of the New York City area, where Brasher was known, and his address was added as an aid to its redemption, much like the edge devices on the later Talbot, Allum & Lee coppers. The New York style doubloons, on the other hand, proclaim-

ed their state of origin in their types.

Why Brasher used two different letter punch sets for his name on the Lima and New York style doubloons is another unresolvable question. A silversmith's punch sets were a valuable property, often being pledged for loans or specifically bequeathed at death.[54] It is unlikely that a perfectly good set of letter punches would be discarded and another purchased in their place. Whatever the reason may have been, it escapes us today.

The Newcomer-Garrett Lima style doubloon was more sharply struck than any surviving New York style coin, an observation that has led one authority to suggest that different minting equipment must have been used to coin the former.[55] The two known Lima Style doubloons were both struck at least twice, to bring up the detail in the dies. Since they are on thicker planchets than the New York style doubloons, they necessarily required a sharper impact from the dies and so higher striking pressures than did the latter. If their sharpness of detail does imply different presses, however, the question remains unanswered.

Contemporary source material available today cannot answer these questions, nor can the present state of numismatic technology. They remain as mysteries about an issue which, however, may now rightfully take its place as a legitimate early American coinage.[56]

[1] Note the limited listings in Elvira Clain-Stefanelli, *Numismatic Bibliography* (Munich, 1985), nos. 12198, 12200, 12227-28, 12413 and 12430; and the notes to Walter Breen's "Brasher and Bailey: Pioneer New York Coiners, 1787-1792" in Harald Ingholt, ed., *Centennial Publication of The American Numismatic Society* (New York, 1958), pp. 137-45.

[2] This study would not have been possible without the cooperation of the following: Eric P. Newman, who shared information on the Lima Style doubloon from his files; John J. Ford, Jr., whose photo and data files were freely offered; Donald Groves, for agreeing to allow me to photograph his Brasher New York style doubloon, the finest known; Q. David Bowers and Raymond N. Merena, for photographic facilities; Kenneth E. Bressett, for photographic assistance; the photographic staff of The American Numismatic Society, for supplying prints and slides; and Cathy Dumont, staff photographer for Bowers and Merena, whose work graces this article.

The name "Brasher Doubloon" is traditionally given to the gold coin with the New York arms/rising sun EXCELSIOR type. To avoid confusion with the Lima style doubloon, the terms "New York style" and "Lima style" are used herein to distinguish the two.

[3] The vast majority of the references to the Lima style doubloon are either repetitious of the same author's earlier work, or of little academic interest. Those that are specifically discussed in this paper are the more significant ones; those that are not, have been deliberately omitted.

[4] The "E.B" counterstamp on the New York doubloon was familiar to collectors, since Sylvester S. Crosby had plated and described the type in 1876 (*The Early Coins of America*, pl. 9, p. 332), but it was not until Lyman H. Low described a George I guinea counterstamped "E.B" that Brasher's punch was published on any other coinage; see his letter in *AJN* 25 (1890/91), p. 70.

[5] "Proceedings of the American Numismatic Society from February 21, 1914 to January 16, 1915," *AJN* 48 (1914), pp. xxxiii-xxxv. Low later corrected the report by reminding readers of the real discovery specimen in Scott's 1894 "Paris" Collection sale.

The story of the discovery of the Newcomer specimen has been variously told. The authors of the 1914 ANS committee report related that Newcomer "...recently obtained a number of early Spanish and other foreign gold coins from a lady, who informed him that they had been accumulated many years ago." ("ANS Proceedings," p. xxxiii). When Garrett later acquired this example from B. Max Mehl, a different story seems to have accompanied the coin. According to a letter from Sarah Elizabeth Freeman of The Johns Hopkins University to Eric P. Newman, dated May 5, 1958, the Newcomer piece "...had been contributed to the Red Cross in 1914 by an elderly lady then residing in Cumberland, Maryland. It had presumably been in her family for years, without anyone knowing what it really was." Although the documentation no longer survives, it is plausible that the Red Cross suggested that the "elderly lady's" numismatic donation be turned into a cash one, and that Newcomer was chosen as the purchaser. The author is indebted to Eric P. Newman for making this interesting letter available for this study.

[6] "ANS Proceedings" (above, n. 5), p. xxxiii. This description of the coin's physical appearance and legends was a classic example of the careful observation that characterized Woodin's and Adams's other numismatic efforts, and, until now, was the most accurate and detailed published. Few features escaped the authors. Those that did may have been overlooked more through haste than carelessness.

[7] "ANS Proceedings" (above, n. 5), pp. xxxiv-xxxv. Raymond, one of the authors of the ANS committee report, did not list the Lima style doubloon in his later *Early New York City and State Merchants' Tokens, 1789-1850* (New York, 1936), and it has been suggested by one authority that this omission implied that Raymond did not accept it as genuine. Raymond's listings only included pieces that both advertised their maker's occupations and places of business, as well as serving some currency purpose. Further, neither the New York nor the Lima style doubloons would have fallen within Raymond's time frame of 1789-1850. It should be noted, in addition, that Raymond was Colonel E. H. R. Green's numismatic advisor and that Green insisted that Raymond regularly review all of Green's intended purchases before payment was tendered. When Green decided to buy the "Paris" Collection specimen from Mehl, who had just received it back from Garrett in trade for the finer Newcomer coin, it may be assumed that Raymond gave the discovery specimen his "imprimatur" at that time. It does not seem probable that the omission of the Lima style doubloon from Raymond's listings of New York City store cards suggests anything about his opinion of its authenticity.

[8] "A Noteworthy Coin Discovered," *The Numismatist* 1915, pp. 154-56.

[9] Adams (above, n. 8), p. 156.

[10] Mehl was more a promoter of numismatic properties than a student of coins,

but it should be stated that the health of the modern collecting hobby owes him a great debt of gratitude. His lengthiest and most interesting catalogue descriptions often included quotations from more serious numismatists about the coin offered for sale. His description of the "Paris" Lima style doubloon is a classic example of Mehl at his best. It may most conveniently be consulted in Arthur M. Kagin's "Spanish American Style Brasher Doubloon: The Most Valuable American Coin," *Numismatic Scrapbook Magazine* 1957, pp. 2097-2103, an article which owes much to Mehl's style.

[11] 10th ed. (1957). For Kagin's article, see above, n. 10.

[12] The full pedigree of the "Paris" Collection piece may be given as: "Paris" Collection-Ten Eyck-Garrett-Mehl-Green-Green Estate- Bern's Jeweller's-John J. Ford, Jr. and Stack's, jointly-Hollenbeck Coin Company(Kagin Brothers)-private owner. For years after acquiring the coin, Kagin advertised it as "The World's Most Valuable Coin" in the pages of the *Numismatic Scrapbook*.

[13] *The Guidebook of United States Coins*, p. 40.

[14] P. 43; repeated in the 45th edition (1992).

[15] 18th ed. (New York, 1957), p. 175. Although the New York style doubloon was included among early New York coins, and both "types" were plated, the Lima style was simply noted in the introductory paragraph to the private gold issues section and was not plated. The wording of the description was somewhat equivocal: "The very first American private gold is not actually listed in this section, for tradition's sake, but really deserves the name. It is the series of doubloons and similar pieces issued by Ephraim Brasher, goldsmith, of New York. Some of these are imitation Peruvian doubloons, of cob design, but signed BRASHER." What the "similar pieces" were was not stated, unless the myriad gold coins with various "E.B" counterstamps were meant to be understood. As the New York style doubloon was included in the early New York section, but just as easily could have been moved to the private gold coins part of the volume since they were not struck under any authority other than Brasher's own, the Lima style doubloons could have been included earlier in the listings.

This confusion of placement is easily explained. Wayte Raymond had died in 1956, leaving the rights to the *Standard Catalogue* to his widow, Olga. According to Ford, who was the de facto editor of the 18th edition and gave this account to the author, Mrs. Raymond refused to make any changes to the layout of the Standard Catalogue, for reasons of economy. Accordingly, while both Ford and Breen, who was responsible for the basic research for the series, wanted the Lima style doubloon listed under New York issues, Mrs. Raymond would not allow its addition since that would mean changing the layout of the book. The only space open in the planned 18th edition that could accommodate the listing for the Lima style doubloon was in the text portion of pp. 175-76, under "Private Gold Issues," and so it was placed there. Even so, there was no space available for a plate without deleting some text, and so no illustration was included.

[16] Breen (above, n. 1), p. 145.

[17] "The seemingly anonymous Lima doubloons with their cabalistic initials must have appeared as the logical type for a private issue that would both match something already in circulation and not offend patriotic sensibilities." Breen (above, n. 1), p.

143. It was, perhaps, unfair to call the initials on the obverse "cabalistic." Anyone well off enough to have recourse to gold coins on a frequent basis in New York City in 1785-90 would have immediately recognized them for what they were: denomination, date, and mintmark. The general public, unaccustomed to such high denomination gold coins, may not have understood the meanings of the initials, however.

[18] "Pass a New York doubloon, with its strange design, and it would be looked upon *with suspicion and possibly* refused; pass a worn Mexican or Peruvian gold coin—or something enough like it [author's emphasis]—and it would be accepted with hardly a second glance after the clear ring and heavy weight are noted," Breen (above, n. 1), p. 143. It will be noted later in this paper that weights of both the New York and Lima style doubloons are lighter than the Spanish colonial standards of 1742-87.

[19] *Counterfeiting in America* (1968), p. 64. It should be noted, however, that Glazier Wheeler, the infamous New Hampshire counterfeiter called the "Money Maker of Cohoss," was arrested in 1774 for making false Mexico City 8 reales pieces. Wheeler escaped from prison, and was later recorded as having made more false 8 reales coins in Massachusetts in 1785. An example of Wheeler's work appeared as lot 4131 of Bowers and Merena's Nov. 1990 auction sale. Wheeler's career is outlined in Kenneth Scott's "Counterfeiting in Colonial New Hampshire," *Historical New Hampshire* 13 (1957), pp. 3-38.

[20] Don Taxay, *The Comprehensive Catalogue and Encyclopedia of United States Coins*, 1st ed. (New York, 1971); 2nd. ed., edited and revised by Joseph H. Rose and Howard Hazelcorn (New York, 1976).

[21] The catalogue descriptions of the two New York style doubloons and the Lima style doubloon in the Garrett Collection formed the basis of an article on Brasher and his coins, see Richard A. Bagg and Q. David Bowers, "Ephraim Brasher as Mint-Assayer and the Lima-Style Doubloon," *The Numismatist* 1981, pp. 608-11. This essay is still useful, as a convenient single source for most of the biographical details then known about Ephraim Brasher. Vernon L. Brown's "The Brasher Doubloon," *The Numismatist* 1964, pp. 751-55, served as one of the sources for the Bagg-Bowers article. Brown's conclusion that the New York style doubloons were "patterns" for a copper coinage is not generally held.

[22] Bowers and Ruddy Sale Mar. 25-26, 1981 (The Garrett Collection IV), p. 168.

[23] "The Brasher Bicentennial," *Coinage Magazine* (Jan. 1987), pp. 17, 22, 116, 118, 120, 122.

[24] Alexander (above, n. 23), pp. 120, 122. This quote was taken from the Garrett Collection catalogue description of the Lima style doubloon.

[25] Alexander (above, n. 23), p. 122.

[26] *Walter Breen's Complete Encyclopedia of U.S. and Colonial Coins* (New York, 1988), pp. 92-93. The weights of both known pieces are given under no. 984, and the Newcomer-Garrett piece is plated.

[27] *Coin World Comprehensive Catalog & Encyclopedia of United States Coins* (New York, 1990).

[28] *CWCat.* (above, n. 27), p. 63. Since the 1981 test results have not been published before, this omission was, to say the least, unusual. As will be further demonstrated in the text, this interpretation of the evidence for the authenticity of the Lima style doubloon was somewhat misleading.

[29] *CWCat.* (abov, n. 27), p. 63.

[30] Ford has informed the present author that the "photographic overlays" referred to were not made.

[31] As noted earlier, Raymond, one of the authors of the 1914 ANS committee report on the type, may have had questions about the Lima style's authenticity. If he had, however, it should be recognized that they were not strong enough to withhold his endorsement of the report, which he signed along with his fellow committee members.

[32] All published accounts of the Lima style doubloon have accepted its authenticity. Those who believe it to be a fabrication have never offered their arguments against it in print.

[33] In describing the Lima style doubloon, I shall call the side with the royal name the obverse, even though the type shown on that side corresponds to the prototype's reverse design. In this, I keep company with all previous writers on the subject. The designer(s) of the Lima style doubloon created a source of confusion which I shall do my best to obviate.

[34] Glazier Wheeler's counterfeit 1770 Mo Spanish 8 reales were detected by New Hampshire officials in 1774, for example, by Wheeler's failure to place the diminutive "O" of the Mexico City mintmark directly over the "M." On Wheeler's products, the "O" touched one corner of the "M" below it, and this was stated as diagnostic of a Wheeler counterfeit (see above, n. 19).

Later, in 1789, notices alerting the public to false 1781 and 1789 Spanish 8 reales, 1770 French ecus, and adulterated Spanish doubloons, appeared in many local newspapers, e.g. those in *The Boston Gazette and Country Journal*, Aug. 24, 1789, and *The New Hampshire Gazette, and the General Advertiser* (Portsmouth), July 30, 1789. The author owes thanks to Dr. Philip L. Mossman for these notices.

[35] Garrett:607, the finest known New York style doubloon, was also shift double struck on both sides.

[36] These are Garrett:607 and 2340, 407.9 and 411.5 gr, respectively; the Ten Eyck specimen, 408.3 gr; the Yale University coin, 407.5 gr; the Jackman sale piece, 411.0 gr and the specimen in the National Numismatic Collection, 406.8 gr.

[37] See Christie's (Geneva) Sale, Nov. 1981, 478-84. Weights given there in grams have been converted here to grains.

[38] Reproduced in facsimile in Stack's pamphlet advertising for sale the Yale University specimen of the New York doubloon, n.d., p. [4], and originally entitled "A Table to ascertain the value of sundry Coins of Gold, as regulated by the Chamber of Commerce; which shews, at one view, their value in Great Britain."

[39] The original test results and allied documentation, published here for the first

time, were provided by the present owner of the Newcomer-Garrett Lima style doubloon.

[40] Bowers outlined these in *Coin World*, Aug. 31, 1988, p. 1.

[41] These analyses were conducted on behalf of Stack's, in connection with their sale of two gold ingots said to be of mid-eighteenth century Spanish colonial manufacture. Results of these analyses have been alluded to in the intervening years, most recently by E. G. V. Newman in his "Spanish Colonial Gold Bars [Ingots] from the Mexico Mint," *Numismatic Circular* 1990, p. 51. Although the authenticity of the ingots has been questioned, the validity of the test results conducted on them, and the associated pieces referred to in this present study, has never been.

[42] In fact, the authors of the Johns Hopkins report stated in their concluding remarks that "Both the surface characteristics and the elemental composition are substantially the same between the unique doubloon [Garrett:2340] and the "Lima" doubloon...."

[43] Above, n. 5.

[44] Above, n. 8.

[45] This technique has been described in the present author's "Our Country's First Silver Dollar," *The Numismatist*, 1989, pp. 1249-54.

[46] This feature, and the line of inquiry it suggests, were first noticed and proposed by Ford, and were privately communicated to the author in a telephone conversation on July 11, 1988.

[47] Besides the rust spots noted, diagonal file marks are visible below the E in Brasher's touchmark. These begin at the lower edge of the bottom cross stroke of that letter, and run into the field of the punch for about 1 mm. Together with the rust spots, this additional feature serves as a nearly infallible aid in the authentication of any putative "E.B" counterstamped coin as a product of Ephraim Brasher's workshop.

[48] It must be remembered that opponents of the authenticity of the Lima style doubloon have never published their arguments.

[49] Chalmers's coins are of the correct weight for their intended denominations, but specific gravity measurements on all tested show their silver content to be below that expected from the Spanish colonial silver they were struck to replace.

[50] The suggestion that the New York style doubloons were a species of "pattern," struck as souvenirs for Brasher's eventually unsuccessful petition for a New York coinage contract dated Feb. 11, 1787, is unsupported by any contemporary documentation or parallel experience. It would be unusual to strike in gold patterns for a coinage intended in copper. Both Brown (above, n. 21) and Taxay (above, n. 20) have offered these suggestions.

Some records from the Bank of New York's activities 1784-87 survive, particularly the General Ledgers and Signature Books. These would, however, only serve to establish Brasher as an account holder. The bank's Minute Books, records of meetings of the Board of Directors, survive from 1791.

[51] *American State Papers, Documents, Legislative and Executive, of the Congress of the United States* (Washington, 1832), Class 3, Finance, vol. 1, "Estimated Expenditures for the Year 1796," notes that a $27 treasury warrant was allowed "...in favor of John Shield, assignee of Ephraim Brasher; being for assays made by said Brasher, in the year 1792, for the mint on sundry coins of gold and silver, pursuant to instructions from the then Secretary of the Treasury."

[52] Although some of his conclusions have been contested, Everett T. Sipsey offered a suggestive observation when he wrote that Brasher's work in early 1786 was "...done by some man in Ephraim Brasher's employ who was quite capable and could space and align the letter punches very professionally. At the end of 1786 the workmanship deteriorated. Perhaps Brasher had hired a less skilled worker at this time," see "Dies by Wyon. II." *CNL* 17 (1966), p. 169.

On the contrary, in a letter to the author dated Jan. 9, 1991, noted silver expert Mrs. Dean A. Fales wrote "The fact that the back appears to be by a different hand, however, does raise a lot of questions in my mind." She went on to say that it was "...totally unlikely that an apprentice would be employed for this more difficult and specialized task [of cutting the die]. Any hint of naivete in the design of a coin or medal would shriek counterfeit then and now, I would think."

Since the E.B punch on the Lima style doubloons was Brasher's own, some explanation for the crude reverse must have existed at one time.

[53] Daniel Christian Fueter also stamped his name with N:York, for example. As noted earlier, there are suggestive signs of an address at the base of the sun and mountains side on Garrett:607.

[54] See Martha Gandy Fales, *Joseph Richardson and Family, Philadelphia Silversmiths* (Middletown, CT, 1974), pp. 202-3, the sale of the estate of Philip Hulbeart, Philadelphia goldsmith ca. 1763. The reproduced inventories of the estates of Lancaster, PA silversmiths Abraham LeRoy and John and Peter Getz may be seen in the appendix to Vivian S. Gerstell, *Silversmiths of Lancaster, Pennsylvania 1730-1850* (Lancaster, 1972).

[55] Newman, in a private communication to the author dated Dec. 20, 1990.

[56] Some time after this paper was presented, William Swoger undertook a biographical and numismatic study of Ephraim Brasher and his coinages. His work offers much that is new, including stronger evidence for a connection between Brasher, his coins, and the Bank of New York. For example, Swoger believes that the reverse type of the New York style doubloon is identical to that found on the bank's own seal. Swoger's study supplements my own and may be read in the June 1, 1992 issue of *Coin World.*

# American Indian Peace Medals of the Colonial Period

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When Lewis and Clark gave Indian chiefs medals bearing the portrait of President Jefferson they were following a practice of over a century's duration. The medals were engraved and struck in the United States Mint on official authority and were distributed by Presidential instructions. They bore a simple portrait of the President on the obverse and the joined hands of an Indian and a European with a peace pipe and tomahawk above.[1] This type would be maintained through the following five decades with the substitution of the image and name of the current President. The development of the imagery and practice which led up to these medals was far less regular and straight-forward than their subsequent history.

Though hundreds of medals are documented as having been distributed to Indians in the eighteenth century by the French, the English and the Americans, almost no specimens are known from controlled archaeological context, and the identification of a specific object as a colonial Indian Peace Medal can only be made on the basis of vague and often suspect provenances, descriptions culled from documentary sources and the physical appearance of pieces in modern collections. It is evident that the record of surviving types is incomplete, and some pieces often adduced as Indian Peace Medals have no clear claim to such designation.

American Indians appear to have had a developed tradition of gift exchange before their first contacts with Europeans. When treaties were made between tribes, exchanges were made of beaver pelts, wampum belts, peace pipes and tomahawks; the skins and belts were then worn as a symbol of alliance.[2] It did not take Europeans long to enter the network of gift exchange; by 1602 Indians of the Massachusetts coast proudly wore copper chains, earrings and collars of European origin.[3]

Europeans began the practice of wearing a medal with the portrait of a ruler by the early sixteenth century, as illustrated in a 1533 portrait by Lucas Cranach the elder, showing Gregor Brück wearing a medal of the newly installed elector of Saxony. By the seventeenth century, Germans commonly wore oval medals, sometimes in elaborate mounts, as signs of loyalty to rulers.[4] In England, also, the wearing of medals of rulers became common; the medal of James I of 1604 for the treaty with Spain is often found mounted for wearing.[5] The oval medal of Parliament of 1642, which proclaims a rather limited allegiance to Charles I, is usually found with a loop for wearing.[6] In France, men of the seventeenth century also wore medals depicting their rulers, as well as metal badges showing membership in orders of knighthood.[7]

Among the earliest medals relating to European colonies in the

1. Cecil Calvert, Lord Baltimore, 1632.

New World are several of Cecil Calvert, Lord Baltimore, from 1632 (fig. 1). Nothing is known about the use of these medals, but as most have loops, it can be inferred that they were made for wear, possibly even by Indians in the new colony of Maryland.[8] An early documented case for the giving of medals and similar objects to Indians friendly to the early English colonies comes from Virginia. A decree of 1661 provided that to be able to identify friendly Indians within colonial settlements, "badges, silver plates and copper plates, with the names of the town graven upon them, be given to all adjacent kings within our protection."[9] Probably to be associated with this is a silver badge depicting tobacco plants with the legend "The King of Patomeck" (fig. 2). A related silver badge bears on its only engraved side the title of Charles the Second with Virginia as one of his kingdoms, around a shield within a garter, a crown above and the legend "The Queen of Pamunkey" on a plaque below. It resembles the Garter badge of the period.[10] Patomek and Pamunkey were Virginia tribes of the seventeenth century. The Queen of Pamunkey badge is engraved in fine style and was probably produced in England; the King of Patomek is cruder and might have been made in the colonies.[11] Neither is a product of a royal mint, and their distribution seems to have been more for identification and control than as a sign of alliance or treaty.

In the seventeenth century, the French developed the royal medal into a major aspect of official ceremony and propaganda.[12] In the 1670s, more than a hundred gold medals and chains were presented by Louis XIV to European dignitaries.[13] Sometime before 1670 a Canadian Iroquois was brought to Versailles by Jesuits and received a silver medal, which he proudly wore after his return to

2. King of Patomeck Medal (reduced), Courtesy of the Virginia Historical Society.

Canada.[14] In 1683, a chief of the Assiniboine wore a medal on his chest which he had received from the Governor of New France.[15] In neither of these cases is it known which French medal was presented, but it is almost certain that both were official government issues bearing a portrait of Louis XIV. The first French medal which we know specifically to have been given to Indians is the "Felicitas Domus Augustae" medal of 1693; a letter by a nun written in 1723 describes Indian chiefs as being buried with this medal, which was suspended from a fire-colored ribbon. This medal was awarded, into the early years of the eighteenth century, to Europeans as well as to Indians.[16] It was probably the type of the 40 medals, 30 in silver and 10 in vermeil, documented as being sent to the Vice-Roy of Canada in 1710.[17]

The gifts of royal French medals to Indians continued in great number in the reign of Louis XV, at the rate of about a dozen a year in the early 1720s.[18] It is not certain what medals were sent early in his reign, but by mid-century the Abenaki chiefs are documented to have worn a medal depicting two allegorical figures and the sim-

ple legend "Honos et virtus."[19] This medal is distinctive among those of Louis XV in not having a date; it was probably intended to be given over a span of years. As all specimens found have an obverse die by Duvivier used also with reverses dated 1730, it can be assumed that the type was initiated around that year, and may well have been issued until the end of the French colonies in 1763.

The English were in wide-ranging competition with the French for the allegiance of various Indian tribes and confederations. On the peace medal level, they were at a decided disadvantage in comparison to the well-organized medallic bureaucracy of the Sun King. In England, official medals were made and distributed for coronations, but medals for other occasions were at the personal initiative and profit of the mint engravers.[20] In 1710, when the Governor of New York sought to convince the chiefs of the Five Iroquois Nations of the superiority of English rule over that of French, he gave one medal to each tribe illustrating a recent victory of Queen Anne, as well as 20 silver coins pierced or mounted for wear.[21] The identity of these medals is not known, but there were no English medals of the period of the size or splendor of the French medals being given to Indians. The pierced and worn example in the ANS Collection of a 1703 medal for the capture of continental cities by Marlborough may be one of those given by the English to Indians on this or a similar occasion.[22] The medal was engraved by the mint master John Croker and is known with two sets of dies, so is as close to an official issue as English medals offer for the period.

On the accession of George I in 1714, Croker produced a series of medals for the entry into London and the coronation of the new monarch (fig. 3). These followed the standard pattern of obverse legend in Latin and reverse legend bearing the date. A gold exam-

3. George I, Coronation Medal by John Croker, 1714.

ple of the coronation medal is documented as having been given in 1721 by the governor of Pennsylvania to the head of the Five Nations.[23] A number of medals have been found, chiefly in Western Pennsylvania and New York, which appear to have been distributed to the Indians in the name of this king.[24] They are, however, anomalous in many aspects and cannot be considered in any way official issues. All known are of copper alloy, though some may have been silver plated. The obverse, which is clearly copied from that by Croker, bears a legend in English, rather than the Latin on the mint issues; on some examples the initials TC appear to copy the IC on the Croker obverse. The reverse depicts an Indian shooting a deer, with no legend or date. Despite the entreaties of colonial governors for presents to distribute to Indians, and the presentation of one gold coronation medal to an Indian chief, the George I medals with the Indian scene reverse appear to be the results of the private initiative of James Logan, an agent for William Penn, who had them made by a private Birmingham manufacturer. Their distribution may have been more to further Logan's interests in the fur trade than as an act of government policy.

The official nature of the medals given in the name of George II is no less problematical than those of his predecessor. A source from 1753 reports that the new British governor in that year brought with him from England 30 silver medals on scarlet ribbons to distribute to the Indians; these were reported to have the king's portrait on one side and the royal arms on the other.[25] Corresponding to this description are two surviving medals, one in the British Museum and the other in the ANS Collection. Both are cast; that in the ANS is reported to have been found on an Indian trail in Labrador.[26] The source of the obverse is clear; the pieces are cast directly from medals of John Croker of 1731, though the engraver's initials have been eliminated (fig. 4). The reverse is more problematic; none of the medals by Croker, or other English medalists of the period, display the royal coat of arms as the reverse type. The only other medal of the period with such a depiction is a Dutch piece made for the induction of William of Orange into the Order of the Garter at the time of his marriage to the King's daughter.[27] The Dutch reverse, however, lacks the lion and unicorn charges, as does that on the English gold coinage, the only coins of the reign which carry a simple shield as a type. The reverse of the George II Indian Peace Medal appears to have been made specially for that use; the fact that both known examples are cast and without an artist's signature suggests that it was the product of an unofficial manufacture, perhaps at the initiative of the individual who presented it, rather than as

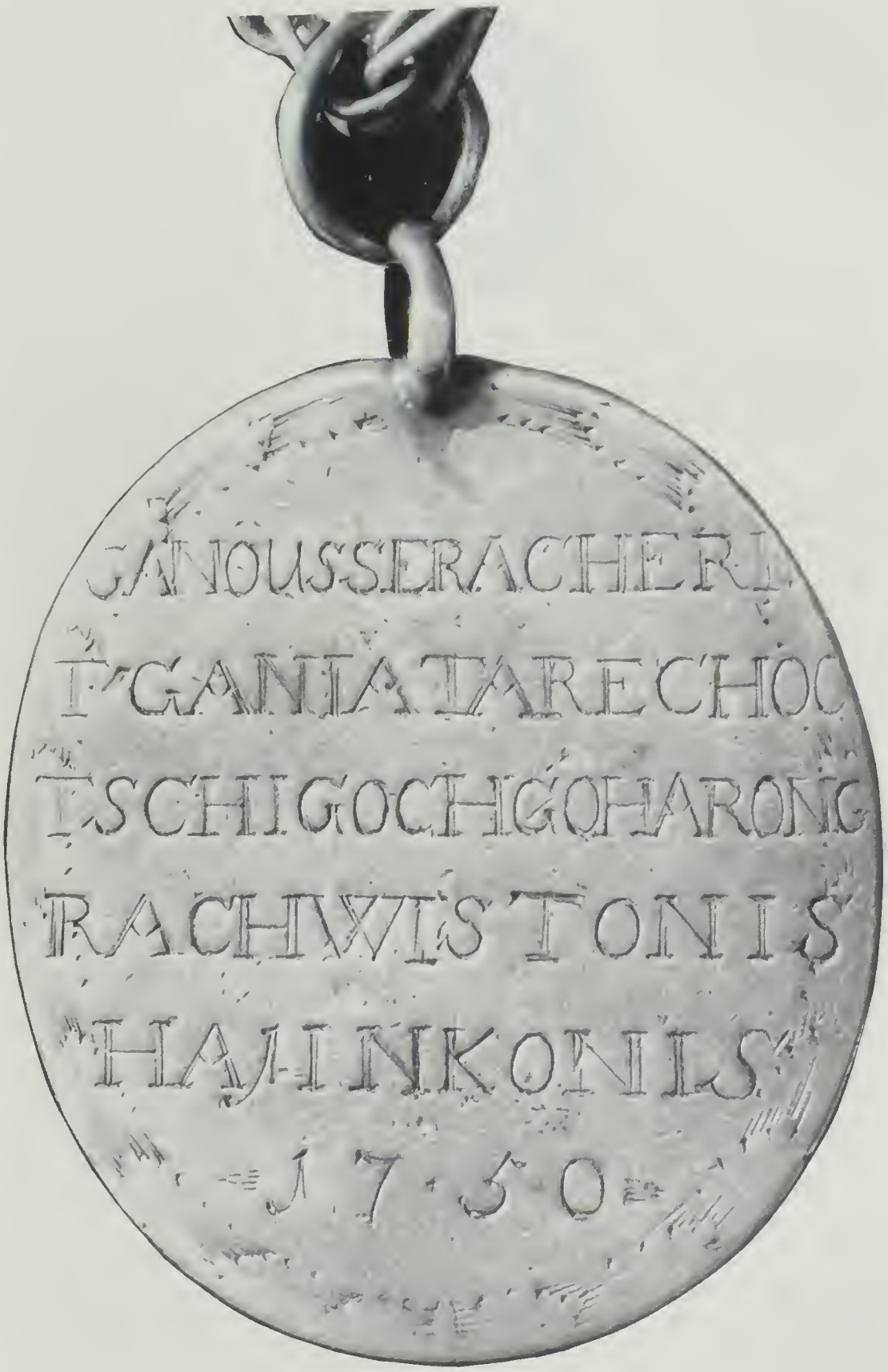
4. George II, Second Treaty of Vienna by John Croker, 1731.

an act of the government.

An even more intriguing medal in the name of George II is in the collection of the New-York Historical Society (fig. 5). It was given to General Philip Schuyler near the end of the eighteenth century by a Mohawk Indian who had apparently been presented with it in 1750. The obverse of the cast medal bears facing busts identified in the English legend as George and Caroline, King and Queen of England. The reverse bears the date 1750 and a legend in the Mohawk language saying that the medal was made for Pleasant Lake of Cayuga.[28] The obverse of this medal appears to be copied from a large medal of 1732 by Croker which was made in gold, silver and bronze for distribution to foreign dignitaries.[29] The reverse of the English medal is by John Tanner and depicts heads of members of the royal family. The similarity of this reverse to that of the Louis XIV medals distributed to Indians by the French in this period, as well as the size and documented use of the English medal for presentation, combines with its availability to an American engraver in 1750 to suggest that the 1732 English medal may have been used as an Indian Peace Medal, even though no examples are known which are pierced or from Indian contexts.

Members of the Society of Friends, or Quakers, were among the most active distributors of medals to Indians in the middle of the eighteenth century. In 1756 they are documented to have distributed silver medals with the king's head on the obverse and his arms on the reverse, probably examples of the cast George II medal.[30] In 1757 the Friendly Association for Regaining and Preserving Peace with the Indians by Pacific Measures established a committee to look

5. George II and Caroline, Mohawk Medal, Courtesy of the New-York Historical Society.


GANOUSSERACHERI
TGANIATARECHOC
TSCHIGOCHGOHARONG
RACHWISTONIS
HAHINKONIS
1750

6. George II, Silver Crown, 1746.

into creating its own medal. To engrave the dies, they hired Edward Duffield, a watchmaker who had recently done a medal for the City of Philadelphia to reward the officers who had destroyed the Indian village of Kittaning. The committee approved the patterns presented by Duffield and hired Joseph Richardson, Sr., a member of their Association, to strike silver examples for distribution to the Indians. Within a few months, the society had over 50 medals ready for distribution.[31]

The obverse of Duffield's medal appears to have been copied from the English silver crown of the period, with its short and unabbreviated legend and distinctive lion epaulet (fig. 6). The reverse depicts a Quaker and an Indian sharing a peace pipe. This same scene appears on a gift gorget with the hallmark of Richardson from about the same period, but it has not been determined on which piece the image was used first. The ANS collection has an unpierced pewter striking of this medal, probably a pattern, and three holed strikings in silver from the unbroken dies. All three of the silver pieces have the traces of edge marking, which indicates that they were overstruck on coins originally struck in a decorated collar, though no trace of an undertype is visible on any. The edge marking does not correspond to that on the English crown which served as a model for the obverse; this has a lettered edge. Rather, it corresponds to that on Spanish 8 reales of the era, such as those of Mexico, which are known to have circulated in Pennsylvania in the period.[32] The medals are of significantly greater diameter than 8 reales coins, but are thinner and, allowing for the loss of the piercing, in the same weight range.

In 1760, British forces under the command of Sir William Johnson took the French town of Montreal. To reward the Indians who participated in the action, Johnson sent to New York for silver medals, to bear the image of Montreal and be engraved with the name and

tribe of one of the participating Indians. Documents report a total of 182 silver medals, and 1 in gold, shipped from New York to Johnson about 7 months after the battle. Those known are all cast and are stamped with the hallmark of Daniel Christian Feuter, a New York silversmith on the obverse; they bear the engraved names of several tribes on the reverse.[33]

In 1763, Britain defeated France and gained all of its land in Canada. The Indian tribes which had been loyal to France were now British subjects, and efforts were made to insure this transfer of allegiance. In the spring of 1764, Johnson called for a meeting of the tribes formerly allied with the French to meet in July at Fort Niagara , and again sent to New York for medals to give out as replacements for French medals.[34] To save time, Feuter used molds he had already engraved for a medal to be given to Florida Indians. The obverse appears to have been copied after the 1761 official coronation medal of George III by Lorenz Natter, an engraver at the Mint. The reverse, however, apparently was copied from the Quaker medal of a few years earlier; the scene has been changed from a rustic campfire to a bench on the shores of a harbor, but the Indian and European are still sharing a pipe beneath a tree. Johnson also had a Philadelphia engraver, Henry Dawkins, print 200 blank certificates depicting him giving a medal to a chief.[35]

Some Indians were apparently unwilling to hand in the French medals which by then may have been heirlooms; a few specimens of the Louis XV medal of ca. 1730 exist where the name of Louis has been replaced by George; on the reverse of one such piece in the ANS collection the date 1775 has been engraved.[36]

There is a series of medals, apparently given to American Indian Chiefs by the British, whose manufacture and chronology are a mystery. These are usually looped, are found chiefly in American collections, occasionally have more-or-less trustworthy provenances to Indian owners (including Tecumseh and Pontiac), are known in two sizes and as both solid medals and joined shells.[37] The unsigned obverse is known in at least two dies for the 3 inch variety and one for the 2 3/8 inch diameter. This is close in appearance to that of a medal by Thomas Pingo, an engraver at the Royal mint, and issued in 1760 at the time of the accession of George III.[38] Reverses of examples in both sizes bear the royal arms as appropriate for the Hanoverian kings in the eighteenth century, with the fleur-de-lys in the second quarter. Other examples of the smaller size, using the same obverse die, have on their reverse a coat of arms eliminating the fleur-de-lys in the second quarter. This heraldic change was decreed in 1801, so these specimens cannot have been made before

then. It is evident, then, that the obverse die with the youthful royal portrait was in use into the nineteenth century.

Sometime in this period, the same 2 3/8 inch obverse die was mated with a reverse which depicts a comfortable lion being harassed by a wolf, with a settlement in the background. Explanations of the scene are generally dependent on assumptions about the date of issue, but there is no good evidence to assign the medal to any specific occasion in the period 1760 to 1801. The lion probably represents England, protecting European settlements in the Americas, but the challenge represented by the wolf could be France, hostile Indian tribes, revolutionary colonists in the 13 southern colonies, or the forces of nature. It is also uncertain where these medals were made; the dies are of good style but the lack of signature, the frequent use of shells rather than solid blanks, and the continued use of two of the reverse dies despite major breaks, casts doubt on the assumption that these were official products of the Royal mint.[39]

At the time of the Declaration of Independence in 1776, the leaders of the new United States of America had then three models to consider as approaches to the creation and distribution of medals to make allies of the leaders of Indian tribes. For the French, the distribution of medals had been an official part of colonial policy and was tied into the ambitious medallic program of the royal government. Though English governors distributed medals to Indians, there is no evidence that the crown ever sponsored such distribution or even that products of the Royal Mint were ever given to Indians; private manufacturers in England appear to have made most of the medals distributed by English governors, using medals of the Mint as models. The third approach to medal manufacture was to have the pieces made by silversmiths in the colonies, who had adequate, if crude, facilities for casting, striking and hand engraving medals.[40]

Medallic and heraldic issues were among the first things the leaders of the new nation dealt with, setting up a committee to design a seal for the new nation and a gold medal for General Washington on July 4, 1776, the very day of the signing of the Declaration of Independence.[41] This committee, consisting of Benjamin Franklin, John Adams and Thomas Jefferson, with the assistance of Pierre du Simitière, took six years to come up with a seal that would be adopted by Congress. In the meantime, there was a need for medals to be given to Indians to replace those of the English. The design of the first medals seems to have been effected on an ad hoc basis. In July of 1776, representatives of the Micmac tribe and other

7. George Washington, Micmac Medal, Courtesy of the Department of Coins and Medals, British Museum.

members of the Wabanaki federation met with George Washington in Massachusetts and handed over gorgets with the image of the King and Queen of England; the President of the Massachusetts Council promised to reciprocate with a new gorget with "a bust of George Washington and proper devices to represent the United Colonies."[42] The Massachusetts Council had such medals made and in 1778 these were distributed to chiefs at a peace council. A few months later, some of these chiefs switched allegiance to the British side and handed over the presents they had received from Washington. That is presumably how one example of the medal entered the collection of King George III and is now in the British Museum; the other known specimen has remained in the possession of members of the Micmac nation (fig. 7).

The medal follows the promise of having a picture of George Washington on the obverse, identified only by his initials. The similarity of this depiction to that of a Minuteman on pieces printed

by Paul Revere in this period has lead to an attribution of the medal to Revere, an attractive but as yet unproven hypothesis. In any case, it is almost certainly the work of a colonial silversmith. The reverse shows an Indian seated by a free-standing pillar, a symbol of Liberty as on a Dutch medal of 1772 for the birth of an heir to the throne, and on a German medal of 1783 celebrating American independence. While the European medals depict the column hung with coats of arms, on the Micmac medal the column is surrounded by 13 hands, representing the colonies.[43]

In the decade after 1776, Congress came under increased pressure to authorize a medal for distribution to Indians. In 1786, the Indian Commissioners who met with the Choctaws in South Carolina received British medals from the chiefs and were eager to have American medals to give them in return. The next year, Secretary of War Knox sought to get Washington to authorize the issue of medals bearing the arms of the United States. By 1788, dies are documented to have been manufactured by Albion Cox for striking medals for the Indians. In 1792, an Indian produced a medal which he reported he had received from one of the Indian Commissioners four or five years before, so there must have been medals distributed by about 1788. No silver medals have been found which can be identified with this time period, but a unique bronze piece in the ANS collection appears to be a trial strike for such a medal.[44]

The obverse bears a scene of an Indian stepping on a tomahawk and handing a peace pipe and an olive branch to a bare-breasted woman, who is stepping on arrows and carrying a staff with a pileus or liberty cap on the end. Stars surround her head and an eagle displays his wings behind her. The woman is an allegorical figure, combining the attributes of the classical depiction of Liberty and the newly invented Seal of the United States.[45] The obverse as a whole combines aspects of the obverse and reverse of a design which was proposed to Congress in 1780 for the Seal. The passing of the calumet above the fire recalls the Quaker medal of 1757 and the vignette on the presentation certificate of Sir William Johnson. A panel at the top has been left empty for an inscription.

The reverse bears the Seal of the United States within a chain of 13 links, copied from the 1776 Continental Currency. The seal is represented in most respects as in the version of the Great Seal adopted by Congress in 1782, which thus sets the earliest likely date for this medal. The principal differences are that the head of the eagle is turned the other way, the arrows and branch are in opposed talons, and the wings are pointed down, rather than displayed. All of these differences can be found on versions of the seal used

by Presidents in later years; it may be that this is intended to be a Presidential rather than a national seal and thus in a very subtle way perpetuate the personal aspect of earlier Indian Peace Medals.[46] As Albion Cox was a principal in the Rahway mint in 1786, it is likely that the dies were produced with the intention of striking medals there.[47] It remains uncertain whether any silver medals were actually struck from these dies and given to Indians.

The Indian Peace Medal of 1789 is much more familiar in the literature, and survives in two silver specimens generally acknowledged to be authentic, but virtually nothing is known of its origin.[48] A treaty of 1790 prescribed the granting of "a great medal with proper ornaments" to chiefs of various Creek tribes; the date of 1789 on these pieces may be meant to indicate the year of Washington's inauguration, rather than that of a treaty or of presentation. This medal resembles the presumably earlier bronze pattern in having an obverse scene of an Indian and an allegorical figure and a reverse depiction of the Great Seal. The reverse does not present the heraldic anomalies of the other piece; the eagle is facing left, his wings are raised and the branch and arrows are as on the seal. The scroll bearing the motto "E pluribus unum" is lacking from his beak and the stars are scattered around his head rather than gathered above it. The positions of the figures on the medal's obverse recall the reverse on the Honor and Virtue Indian Peace Medal of Louis XV.

The allegorical figure on the obverse is now Minerva, in her guise as a warrior. She resembles the depiction of this figure on a prize medal engraved in 1767 by Elisha Gallaudet for what was to become Columbia University.[49] On the Indian Peace Medal, Minerva wears her sword, but her shield lies at her feet. The Indian drops his hatchet while passing the peace pipe with his other hand. The scene has been moved from the Indian's environment, the open fire, on earlier peace medals, to that of the European settlers, a ploughed field. Though Washington is not pictured, his name appears above the scene. Neither of the known specimens bears a hallmark, and no documents have come to light concerning the manufacture, but they appear to have been engraved by an American silversmith.

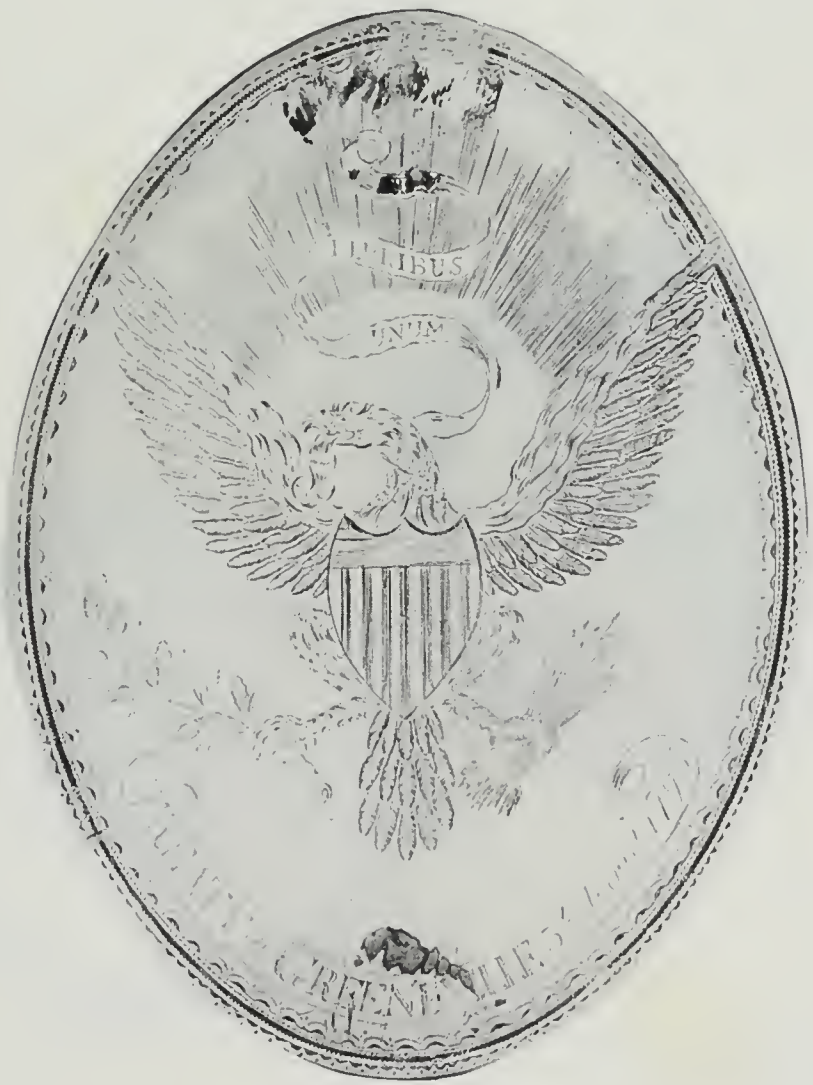
The next known medals are dated 1792, and initiate a series with pieces bearing that date, 1793 and 1795.[50] These are known in three sizes, though not all dates are known in all sizes. There is also documentation to link the presentation of some of these medals to Indian chiefs, the most famous being Red Jacket of the Seneca, who proudly wore his medal for his portrait painted in 1828 by Charles Bird King. The obverse of this medal differs in several ways from

the 1789 one, the most obvious being the substitution of the figure of Minerva with a portrait of Washington. This may have been as a result of complaints by Indians who resented being depicted dealing with a female figure, or in order to give a more personal quality to the presentation by actually depicting Washington as well as having his name. The reverse bears the heraldic eagle, now with the scroll with "E PLURIBUS UNUM" in his beak. Some of the 1783 medals, and all of the 1785 examples, bear hallmarks, one as yet unassigned and one attributable to Joseph Richardson, Jr., of Philadelphia, son of the silversmith who produced the Quaker medal of 1757. In this case, it is clear that Congress contracted with two or more local silversmiths to engrave these medals by hand, an expensive and time consuming process.

Another engraved piece of this era is very problematic; the piece

8. Treaty of Greenville Medal, 1795 (reduced), Courtesy of The Historical Society of Pennsylvania.

which purports to be for the Treaty of Greenville, 1795 (fig. 8).[51] While it is documented that medals were distributed to Indians on the occasion of this important assembly, it is unlikely that the medals were engraved with the date of the treaty on a few day's notice or even that the date was added on the occasion to pre-engraved medals. The other anomalies include the fact that the identical image was used for obverse and reverse, with only minor differences in detail of engraving, and that the only piece with a reasonably secure provenance is not pierced and has no sign of a rim or loop. The provenance of the piece in the collection of The Historical Society of Pennsylvania traces it to an 1877 purchase from the granddaughter of a chief of the Wyandot tribe; it is possible that the piece was made sometime between 1795 and 1877, using as a model the reverse of the 1793 medal which was sold with it.



The next pieces distributed by the United States government to Indians represent a great departure in imagery as well as in manufacture.[52] Rather than having been intended as emblems of political and military alliance, they appear to have been made to reward Indians for adopting aspects of European life, specifically agriculture, animal husbandry, and spinning and weaving. Each depicts one of these activities on the obverse, engraved by C. H. Küchler following designs by John Trumbull; on the reverse they simply identify the second presidency of Washington and bear the date 1796, even though they were actually manufactured and distributed in later years. Probably to save money, the medals were struck from engraved dies by the firm of Boulton and Watt in Birmingham, England, the town of the manufacture of the George I Indian Peace Medals early in the century. These so-called "Seasons" medals were presented to minor Indian leaders, while major chiefs were given the larger, and more traditional, Jefferson medals.

The Jefferson medal in many aspects represents a return to the French conception of the Indian Peace Medal (fig. 9).[53] It was struck at a mint, under government supervision. Its simple devices were personal in import. As in royal medals, the obverse is a bust of the governing individual; no attempt is made to include an In-

9. Thomas Jefferson, Indian Peace Medal, 1801.

dian as had been done on most of the medals from the Quaker piece through those of Washington. It is not known whether this represents a change in the ideologies of those who conceived of the medal or, more likely, an effort to present an image which the recipients would view with more respect. The peace pipe and tomahawk are moved to the back, where they surmount a handshake between European and Indian hands with a simple English legend. The medal was made in three sizes; for technical reasons it was struck on uniface sheets which were bound with a ring. For the issues of later Presidents, the Mint became more proficient in the striking of medals and solid planchets were used, but the personal imagery and simplicity of the Jefferson piece was maintained.

The colonial period, then, witnessed a variety of approaches to the creation and presentation of medals to Indians as signs of alliance. With the Jefferson medals, the experimentation ended and a truly national medallic tradition began.

[1] For the Jefferson medal, see Bauman L. Belden, *Indian Peace Medals Issued in the United States* (1927; repr. ed., New Milford, 1966), pp. 24-29; Francis Paul Prucha, *Indian Peace Medals in American History* (Madison, 1971), pp. 16-24 and 90-95; R. W. Julian, *Medals of the United States Mint; the First Century, 1792-1892* (El Cajon, CA, 1977), pp. 27-34. Unless otherwise noted, comparative pieces illustrated in this article are in the collection of the American Numismatic Society. All Indian Peace Medals of the period in the ANS collection are described and illustrated in Appendix 2, below.

[2] N. Jaye Fredrickson, *The Convenant Chain; Indian Ceremonial and Trade Silver* (Ottawa, 1980), pp. 13-15.

[3] William M. Beauchamp, *Metallic Ornaments of the New York Indians*, New York State Museum Bulletin 73 (Albany, 1903), pp.12-14.

[4] Lore Börner, *Deutsche Medaillenkleinode des 16. und 17. Jahrhunderts* (Würzburg, 1981), pp. 15-20.

[5] Edward Hawkins, *Medallic Illustrations of the History of Great Britain and Ireland*, Augustus W. Franks and Herbert A. Grueber, eds., 2 vols. (London, 1885), vol. 1, pp. 193-94, 14-15.

[6] Hawkins (above, n. 5), vol. 1, p. 292, 108.

[7] Mark Jones, *A Catalogue of the French Medals in the British Museum*, vol. 2 (London, 1988), p. 16.

[8] Hawkins, (above, n. 5), vol. 1, pp. 261-62, 52, 54; C. Wyllys Betts, *American Colonial History Illustrated by Contemporary Medals* (1894; repr. ed., Winnipeg, 1964), pp. 20-21, 34, 36.

[9] Victor Morin, *Les médailles décernées aux indiens* (Ottawa, 1916), pp. 21-23.

[10] Elias Ashmole, *The Institution, Laws and Ceremonies of the Most Noble Order of the Garter* (London, 1672), pl. facing p. 235.

[11] Horace E. Hayden,"An Account of Various Silver and Copper Medals Presented to the American Indians," *Proceedings and Collections of the Wyoming [Pennsylvania] Historical and Geological Society* 2 (1886), pp. 221-22; Betts (above, n. 8), p.26, 45-47; Harrold E. Gillingham, "Early American Indian Medals," *Antiques* 6 (1924), p. 312.

[12] Mark Jones, *Medals of the Sun King* (London, 1979), pp. 1-6.

[13] Henry Nocq, "Médailles offertes en présents par Louis XIV et Louis XV, de 1662 à 1721," *Gazette Numismatique Française* 11 (1907), pp. 131-63.

[14] Morin (above, n. 9), pp 11-12.

[15] Morin (above, n. 9), p. 13.

[16] Appendix 2, below, no. 1; Morin (above, n. 9), pp. 14-15; Josèphe Jacquiot, *Médailles et jetons de Louis XIV d'après le manuscrit de Londres Add. 31.908*, 4 vols. (Paris, 1968), vol. 3, p. 576, n. 13; pp. 624-29.

[17] E. Zay,"Médailles d'honneur pour les indiens," *Annuaire de la Société Française de Numismatique* 13 (1889), p. 297.

[18] Zay (above, n. 17), pp. 297-98.

[19] Appendix 2, below, nos. 2-4; Zay (above, n. 17), p. 296; *Catalogue général illustré des èditions de la Monnaie de Paris* ([Paris, 1983]), 1, 247 and 268, C.

[20] John Craig, *The Mint* (Cambridge, 1953), pp. 202-3.

[21] Hayden (above, n. 11), pp. 222-23.

[22] Appendix 2, below, no. 5; Hawkins (above, n. 5), vol. 2, p. 246, 35.

[23] P.E. B[eckwith],"Medals," in F. W. Hodge, ed., *Handbook of American Indians*, Smithsonian Institution, Bureau of American Ethnology Bulletin 30 (Washington, 1907), vol. 1, p. 831.

[24] Appendix 2, below, nos. 6-11; Ebenezer Nii Quarcoopome,"The Indian Peace Medal of King George I," in Alan M. Stahl, ed., *The Medal in America*, COAC Proceedings 4 (New York 1988), pp. 1-17.

[25] Hayden (above, n. 11), pp. 232-33.

[26] Appendix 2, below, no. 12; Hawkins (above, n. 5), vol. 2, p. 498, 42.

[27] H.A. Grueber, ed., *Medallic Illustrations of the History of Great Britain and Ireland*, (1904-11; repr. ed., Lawrence, MA, 1979), pl. 151, 7.

[28] Sydney P. Noe,"An Indian Medal of 1750," *New-York Historical Society Quarterly Bulletin* 8, 1 (1924), pp. 3-9.

[29] Hawkins (above, n. 5), vol. 2, pp. 500-501, 47.

[30] Harrold E. Gillingham,"Indian Silver Ornaments," *The Pennsylvania Magazine of History and Biography* 58 (1934), pp. 104-5.

[31] Gillingham (above, n. 30), pp. 105-9.

[32] Appendix 2, below, nos. 13-16; Tomás Dasí, *Estudio de los reales de a ocho*, vol. 3 (Valencia, 1951), pp. 132-50; John J. McCusker, *Money and Exchange in Europe and America, 1600-1775* (Williamsburg, 1978), pp. 176-77.

[33] Arthur Woodward,"A Brief History of the Montreal Medal," *The Bulletin of the Fort Ticonderoga Museum* 3, 1 (1933), pp. 17-23; George J. Fuld and Barry D. Tayman,"The Montreal and Happy While United Indian Peace Medals," in Alan M. Stahl, ed., *The Medal in America*, COAC Proceedings 4 (New York, 1988), pp. 19-26.

[34] Appendix 2, below, nos. 19-26; Fuld and Tayman (above, n. 33), pp. 26-37.

[35] Laurence Brown, *A Catalogue of British Historical Medals, 1760-1960*, vol. 1 (London, 1980), no. 23; David B. Warren et al, *Marks of Achievement; Four Centuries of American Presentation Silver* (Houston, 1987), p. 60.

[36] Appendix 2, below, nos. 3 and 4.

[37] Appendix 2, below, nos. 17-25; Melvill Allan Jamieson, *Medals Awarded to North American Indian Chiefs, 1714-1922* (London, 1936), pp. 11-25; Betts (above, n. 8), p. 238.

[38] Brown (above, n. 34), no. 1.

[39] Other medals of George III have been listed in earlier catalogues as Indian Peace Medals, but this identification seems to rest solely on their reverse type of the royal arms and some sort of mechanism for wearing, neither of which criterion is sufficient evidence for the attribution; cf. Brown (above, n. 34), nos. 37, 39-40, inter alia (Brown specifically excludes medals intended for wearing from his catalogue, cf. p. xxiii).

[40] The Spanish faced a similar situation with their acquisition of Louisiana in 1762; their Indian Peace Medals included both royal mint issues and locally engraved pieces, see Prucha (above, n. 1), pp. 11-16.

[41] Richard S. Patterson and Richardson Dougall, *The Eagle and the Shield; A History of the Great Seal of the United States* (Washington, 1976), pp. 6-31.

[42] Harald E. L. Prins,"Two George Washington Medals: Missing Links in the Chain of Friendship between the United States and the Wabanaki Confederacy," *The Medal* 7 (1985), pp. 8-11.

[43] Gerhard van Loon, *Beschrijving van Nederlandsche Historie-Penningen*, vol. 6 (Amsterdam, 1861), pp. 63-64, 475; Betts (above, n. 8), pp. 294-95, 608.

The following information on the reverse type of the Micmac medal has been supplied by Michael J. Hodder:

> The earliest appearance of this type I have found is on the seal on the cover of the *Journal of the Proceedings of the Congress*, September 5, 1774 (Philadelphia). The seal shows the pillar topped by a pileus, supported by 12 hands, resting on the Magna Carta. The next appearance is on the masthead of John Holt's January, 1775, edition of *The New York Journal or General Advertiser*; it is cited in Isaiah Thomas, *The History of Printing in America* (1810), p. 504. The final appearance, which shows the pillar supported by 13 hands, is on a standard at the Smithsonian, illustrated in a document prepared by Major Jonathan Gostelowe in 1778: War Department Collection of Revolutionary War Records, NA, Record Group 93, MC 859, No. 28012.

I am very grateful to Mr. Hodder for supplying this information and giving permission for its publication in this context.

[44] Appendix 2, below, no. 29; Prucha (above, n. 1), pp. 3-5; Belden (above, n. 1), p. 9; Damon G. Douglas,"The First United States Indian Chief Peace Medal," *The Numismatist* 1945, pp. 689-93; R. W. Julian,"The First Indian Peace Medal of the United States," *ANSMN* 21 (1976), pp. 257-59.

[45] Yvonne Korshak,"The Winds of Libertas: Augustin Dupré's *Libertas Americana*," in Alan M. Stahl, ed., *The Medal in America*, COAC Proceedings 4 (1988), pp. 61-78; Patterson and Dougall (above, n. 39), pp. 32-82.

[46] Patterson and Dougall (above, n. 39), pp. 409-57, p. 474, n. 19. Of course, there was no President of the United States under the Articles of Confederation, but there was a President of Congress for whom such a seal may have been intended.

[47] Sylvester S. Crosby, *The Early Coins of America* (1875; repr. ed., New York, 1970), pp. 275-81.

[48] Appendix 2, below, no. 30; Belden (above, n. 1), pp. 11-13; Prucha (above, n. 1), pp. 73-74.

[49] Warren (above, n. 35), p 51, 46.

[50] Appendix 2, below, nos. 31-33; Belden (above, n. 1), pp. 13-21; Prucha (above, n. 1), pp. 73-87.

[51] Belden (above, n. 1), p. 22, 11; Prucha (above, n. 1), p. 88.

[52] Appendix 2, below, nos. 34-43; Belden (above, n. 1), pp. 22-24; Prucha (above, n. 1), pp. 8; 16-17.

[53] Belden (above, n. 1), pp. 24-29; Prucha (above, n. 1), pp. 90-95; Julian (above, n. 42), pp. 27-33.

# Appendix 1: A Catalogue of an Exhibition of Massachusetts Silver at the American Numismatic Society

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**Coinage of the Americas Conference**
**at the American Numismatic Society, New York**

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**Sidney P. Noe and the ANS Collection of Massachusetts Silver**

Sidney Philip Noe—whose name will always be associated with the study of the Massachusetts silver coins—was born in Woodbridge, NJ, on April 4, 1885. He obtained his B.A. from Rutgers in 1910, and his M.A. in 1913. In 1910, he joined the staff of the Gardner A. Sage Library of the Dutch Reformed Theological Seminary not far from Rutgers, where he worked under Dr. C. Van Dyke. In 1915, he was appointed Librarian of the American Numismatic Society. The appointment of Noe coincided with the period when Edward Theodore Newell was taking control of the American Numismatic Society—Newell became President in 1916—and Noe was Newell's right-hand man. It seems odd to us that these two men, so dissimilar in their personalities, should have worked so well together; Newell was so spirited, so alive, so innovative; Noe rather dry and strict. Newell, however, knew and appreciated Noe's steadiness, which complemented his own meteoric qualities, and he certainly counted on Noe's phenomenal capacity for work. Noe carried on the work of the Society during the World War I while Newell served the Army at a desk job in Washington. Noe designed and constructed the rearrangement and the cataloguing of the books in the ANS library. He also created a photofile of photographs of coins from auction catalogues, making up 10,000 cards in the first year. Subsequently he served the Society as Secretary, Editor and Chief Curator. His major work was the publishing of Greek coin hoards: these include *The Mende Hoard* (1926), *Two Hoards of Persian Sigloi* (1956), *A Lycian Hoard* (1958) and *The Corinth Hoard of 1938* (1962). He produced studies of the Greek mints of Metapontum, Thurium, Sicyon and Caulonia. In addition to his work on Greek coins and Massachusetts silver, he also wrote *Hacienda Tokens of Mexico* (1949) with O. P. Eklund. He was a devout Christian, and went to Bethlehem, PA, every Easter to play the organ. He was married to the former Elizabeth Wilber, and had two daughters. This strictness was also in evidence at the Society; Noe was loath to let the staff take Christmas Eve as a holiday, and when Henry Grunthal asked him if he could leave at one o'clock on Saturday to run some personal errands, Noe said, "Mr. Grunthal, it is not for me to give you time off." But this inflexibility was accompanied by a very great kindness, in part rooted in his deep Christian beliefs. Noe was a gentleman of the old school; both George C. Miles and Henry Grunthal have used this phrase in describing him. As early as the 1950s, the staff called him "Papa Noe" behind his back. Every autumn he would go out to New Jersey to pick apples

in the orchards for the exercise (on one occasion accompanied by Grunthal), and would bring back bushels of apples for ANS staff members. He retired in 1953, but continued to come into the Society regularly, especially on Saturdays, carrying a bag of fruit—during the day, at least, he kept to an all fruit diet. He was awarded the Medal of the Royal Numismatic Society of Great Britain and, in 1937, the Huntington Medal of the American Numismatic Society. He was also a member of the American Antiquarian Society of Worcester, MA, partly because of his interest in Massachusetts coinage and early Americana inspired by George Hubbard Clapp. Noe died on June 4, 1969.[1]

One might think that since Noe was curator at the ANS, the Society would have an elaborate reference collection of Massachusetts silver. Such is not the case. There are perhaps half a dozen collections in private hands (some photographed here) which are better than the ANS collection in quality. Where the ANS collection excels, however, is its breadth; only a few Noe varieties are lacking.

Noe was well aware of the Society's weakness in the United States series, and did his best to remedy it. In the *Coin Collector's Journal* of January 1939, Noe wrote,

> It would be natural to suppose that the Museum of the American Numismatic Society would be richest in the coins of our own country, but such is not the fact. Perhaps our institution is not yet old enough.

We should remember, however, that other areas, which we now think of as strong at the ANS, were then very weak. Noe described the collection of ancient coins as "far less developed than the other departments," and in 1939 the ancients were weak, for they were yet to receive the Newell bequest. His account of the ANS collection of English coins is riddled with the phrases "not strong," "not represented in strength," "lean and meagre"—the Norweb donations were then many years in the future. The Spanish and Latin American sections were not as strong as they are now—although the latter was fairly well advanced thanks to the donations of Julius Guttag. There were some hidden strengths at the ANS in 1939 which Noe overlooked: the collection of Caribbean coins was very strong, thanks to Howland Wood and judicious purchases during the Depression, the German trays had many of their great rarities from Daniel Parish, Jr., and the fabulous collection of Swedish coins from Robert Robertson was already part of the Society's cabinet. Oddly, the two areas of coinage which we may consider world class at the ANS in 1939 were Islamic coins, where the ANS had acquired Edward Theodore Newell and Howland Wood's collections in 1917,

and Chinese coins, where the Society had acquired the collection of John Reilly, Jr., in 1930. But many of the cabinet's current great strengths—Alexanders, large cents, Spanish and Spanish colonial—all lay in the future. The years from 1941 onward saw the Society's collection grow faster than it ever had before. This coincided with, and may not have been unconnected to, an explosion in the demand for coins in the United States during and after World War II. Burdette G. Johnson minuted at the bottom of his letter to Noe of March 15, 1943, "In the 40 or more years I've been in this business I've never seen anything like the present demand for coins."

If Noe was somewhat stiff and dry—characteristics reflected in his prose style—he had a remarkable capacity for work, and the ability to turn his hand to many different questions. Noe was aware that the ANS cabinet was weak in the United States series, and he did his best to remedy that, even though his main interest was Greek coins. Throughout this period he was in frequent correspondence with George Clapp, and Clapp provided funds, encouragement and advice for many acquisitions. Thus Clapp warned Noe about Rochester dealer Barney Bluestone's tendency to overgrade:

> I should have answered your statement that you were bidding on a Willow Tree XII at the Bluestone sale, it is a good plan always to see the Bluestone coin before bidding on them as I have discovered that he is rather liberal in interpreting quality. The last lot he sent to me for examination were all returned as in one case his "about uncirculated" I could not rate as "better than fine" as it showed evidence of having been cleaned and buffed. I do not believe that dealers will buff silver coins but they are apt to over-rate.[2]

Noe is not often thought of in connection with New Jersey state coppers, but in 1945, he expanded the Society's holdings of New Jersey state coppers dramatically by purchasing the Prescott Beach collection from Henry Grunthal.

The impulse for Noe's interest in the Massachusetts series came in 1942, when the ANS held an exhibition of coins of America. The highlight of this exhibit was the display of Massachusetts silver, including pieces then owned by T. James Clarke, the Massachusetts Historical Society, William B. Osgood Field, Eric P. Newman and Burdette G. Johnson. The coins were photographed, and these photographs then served Noe as the basis for his three monographs on Massachusetts silver coins. Noe's interest in Massachusetts silver coins arose from his interest in hoards: he prepared a small pamphlet about the Castine hoard in connection with the exhibition,

and this decided him to apply the basic technique of researchers like Newell in the Greek series—the die study—to the early coinage of Massachusetts.

Noe tried to encourage the exhibitors to sell or donate their pieces to the Society, and in some cases, such as Field, Johnson and Carl Würtzbach, he met with success. In the course of preparing his monographs, Noe was always eager to acquire new examples for the Society's cabinet. The major donor to the cabinet was Field.

Curiously, in this section of the cabinet the major acquisitions (other than those donated by Field) were made by purchase. Würtzbach sold the Society Massachusetts silver and state coppers at reduced prices. The Massachusetts coins depicted here which were purchased from Würtzbach are not among the coins shown in his photographic book on Massachusetts coins; rather, they were part of Würtzbach's "number two set." Würtzbach acquired most of his "number one set" from Charles E. Clapp, and sold it on to T. James Clarke; from him it went to Frederick C. C. Boyd, and thence to John Ford, Jr.

The ANS bought many of its finest coins from Johnson's St. Louis Stamp and Coin Company. Johnson was the main agent for Armin W. Brand's portion of the Brand inheritance, and many of the coins bought from Johnson trace their pedigrees back to Virgil Michael Brand, and often beyond him, to other owners such as Dr. Thomas Hall, Dewitt S. Smith, Lorin G. Parmelee, even Charles I. Bushnell. Johnson commented in a letter of January 10, 1939, "As you doubtless know, my own stock and the stock of Brand coins I am holding gives me at this time, undoubtedly, the largest stock of coins in the world." Noe replied on January 13,

> I do know by experience that I can frequently obtain from your firm material which I fail to find elsewhere in this Country.... As to the Brand coins, I suppose they consist of rarities which are beyond our means, but if this is not the case I must rely on you to disillusion me. Do you have any of the multiple thalers of Brunswick, etc.? You know that Mr. George H. Clapp is interested in the large cents; does he know what you have? His collection is ultimately to come to us and he desires to add to it anything he does not already possess. I presume Mr. Newell knows what Greek coins there are in the Brand collection—does he know what you have in your stock?

Johnson answered:

> Owing to the expense of vault space, I try only to keep

> coins on hand in St. Louis that are selling well at the time, which medieval silver (outside of the English series, which is pretty well sold out) is not doing.... The same thing applies to the multiple thalers of Brunswick, of which Mr. Brand has a vast number, including many 10 thaler pieces, but they are selling at present so far below the prices Mr. Virgil Brand paid for most of them, that I have put them to one side, hoping in the future they will do better.[3]

Newell took advantage of this connection to Johnson, and bought numerous ancient coins from the St. Louis Stamp & Coin Company; doubtless many of those coins can be traced back to Brand.

Unfortunately when Noe published his monograph about the Willow Tree coinage, he singled out Burdette G. Johnson by describing him as a "Midwest Coin Firm," when all pieces that were owned by collectors were referred to by name. Johnson did not like discrimination between dealers and collectors, and said so:

> The treatment of my Willow Tree coins in the monograph was extremely unsatisfactory to me and I will not give further assistance in preparing these sort of pamphlets. For some reason or other which I have never been able to fathom, there seems to be an inclination to treat dealers and collectors as being of two entirely different breeds—the dealers not being entitled to the same treatment given collectors even though members of the same society.
>
> Just why coins provided by collectors should have a name of the owner given while coins furnished by me are referred to as belonging to a "Midwest Coin concern" is more than I can understand. This book appeared while I was in New York City and before I had seen a copy of it, an extremely important collector told me about it and appeared to think that I had been very shabbily treated. If Mr. Clarke's coins had been referred to as belonging to a "New York State Collector," it would have been entirely all right to refer to mine as belonging to a "Midwest Coin Dealer" but I have a name the same as Mr. Clarke has and if one name is used, the other should be.
>
> This is not from any desire for advertising because these coins were not included at my request but at your own urgent desire. As a matter of fact, I have never offered them to anybody being in no hurry to dispose of them. What I absolutely object to is the discrimination shown

> between dealers and collectors and I would feel exactly the same about it if it was another dealer and not myself who was affected.

Noe wrote a letter of apology, and Johnson answered,

> When I wrote my letter in June, I did not realize that everyone except me would be listed by name. What I was trying to do was *not* to be conspicuous and to avoid to appear to be advertising. The way it was done—I was made more conspicuous.
>
> As a matter of fact, the average coin and the average collection now gets on the market about as rapidly as if it was in a dealer's stock. Mr. Clarke has sold several collections and doubtless will sell several more.

No coins from Johnson were in fact used for the Oak and Pine Tree monographs, although Eric P. Newman, a close friend of Johnson, did provide coins for these monographs—coins which may well have been acquired from Johnson. Noe and Johnson were reconciled before Johnson's death in February 1947, for Noe visited St. Louis in 1946 and the two men had enjoyable numismatic talks.

The Society bought some very fine pieces of Massachusetts silver from Stack's. Other vendors—New Netherlands, Alfred Hutter—and donors—Charles Wormser, William Allen, Arthur J. Fecht, Joseph Lasser—have provided additional interesting examples.

[1] Information from ANS archives; "Sidney P. Noe dies; Authority on Coins," *The New York Times*, June 5, 1969, p. 47; G[eorge] C. Miles, "Sidney P. Noe, 1885-1969," *Compte Rendu*, Commission Internationale de Numismatique 16 ([Copenhagen], 1969),p. 18; Howard L. Adelson, *The American Numismatic Society 1858-1958* (New York, 1958) passim; information from Henry Grunthal and Francis D. Campbell, Jr.

[2] George H. Clapp, Sewickley, Pennsylvania, December 12, 1942 to Sidney P. Noe in New York, ANS archives. Clapp's remarks about Bluestone buffing coins are interesting. We know that the collector who assembled the Anderson-Dupont collection bought from Bluestone, and that many coins in the Anderson-Dupont sale were buffed. Is it possible that the buffing was done not by the collector, but by Bluestone?

[3] Correspondence between Sidney P. Noe and Burdette G. Johnson in the ANS archives.

## *New England Coinage*

1. Shilling, Noe 1-A, 69.9 gr (4.53 g), 6:15 o'clock; J. H. Judd collection; W. J. Wild; Norman Stack collection.

2. Shilling, Noe 2-A, 71.7 gr (4.65 g), 6:00 o'clock; Haines (1888)-John Story Jenks (Henry Chapman, Dec. 1921, 5383, realized $105); Charles Jay (Stack's Oct. 27, 1967, 2); Gibson (Stack's Nov. 11, 1974, 1); Sam L. Stone, Aug. 12, 1986 to Andrew M. Hain collection.

3. Shilling, Noe 2-A, 66.7 gr (4.32 g), 5:45 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.10.

4. Shilling, Noe 3-A, 70.5 gr (4.57 g), 5:30 o'clock; Joseph Lasser collection.

5. Shilling, Noe 3-B, 71.1 gr (4.61 g), 2:00 o'clock; Alan V. Weinberg collection.

6. Shilling, Noe 3-C, 72.3 gr (4.68 g), 5:45 o'clock; Loye P. Lauder, William Doyle Galleries Oct. 1983 sale, 113; Anthony Terranova collection.

7. Shilling, Noe 3-C, 71.5 gr (4.63 g), 5:45 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.11.

8. Shilling, Noe 3-C, 70.2 gr (4.55 g), 12:00 o'clock, flan crack at 10:00 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.6.

9. Shilling, Noe 3-C, 69.8 gr (4.52 g), 5:45 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.9.

10. Shilling, Noe 3-C, 71.6 gr (4.64 g), 5:30 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.7.

11. Shilling, Noe 3-C, 70.7 gr (4.58 g), 6:30 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.8.

12. Sixpence, Noe 1, 31.4 gr (2.03 g), 6:00 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.5.

## *Willow Tree Coinage*

13. Shilling, Noe 1-A, 67.9 gr (4.40 g), 2:00 o'clock; Andrew M. Hain collection.

14. Shilling, Noe 2-A, 69.7 gr (4.52 g), 12:00 o'clock; Andrew M. Hain collection.

15. Shilling, Noe 2-B, 70.8 gr (4.59 g), 2:15 o'clock; Norman Stack collection.

16. Shilling, Noe 2-B, 71.1 gr (4.61 g), 11:00 o'clock; Andrew M. Hain collection.

17. Shilling, Noe 3-C, 70.8 gr (4.59 g), 7:00 o'clock; Joseph Lasser collection; unusual double warp.

18. Shilling, Noe 3-D, 70.9 gr (4.59 g), 1:00 o'clock; Andrew M. Hain collection.

19. Shilling, Noe 3-E, 68.7 gr (4.45 g), 4:00 o'clock; Joseph Lasser collection.

20. Shilling, Noe 2-B, 67.7 gr (4.39 g), 12:00 o'clock; O. K. Rumble of Mission, Texas; purchased from the ANA convention sale, held jointly by Numismatic Fine Arts (Edward Gans), Hans M. F. Schulman, Henry Grunthal and New Netherlands Coin Co., Inc., Aug. 16-21, 1952, 2362, (price realized list has $180, but ANS records say $210), with monies from the George Hubbard Clapp Fund; ANS 1953.161.1.

21. Shilling, Noe 3-D, 71.0 gr (4.60 g), 2:00 o'clock; Barnes; June 1901,to Dr. Thomas Hall; Sept. 7, 1909, with the rest of the Hall collection to Virgil Michael Brand; on his death, 1926, to Brand estate; 1934, to Armin W. Brand; consigned by Armin W. Brand, Apr. 8, 1936, to Burdette G. Johnson; exhibited as the property of a "Mid-West Coin Firm" (i.e. Burdette G. Johnson) at the ANS in 1942, and photographed for Noe's monograph; Johnson's St. Louis Stamp & Coin Company sold it to the ANS, April 1944, for $250; ANS 1944.61.1.

22. Shilling, Noe 3-E, 70.1 gr (4.54 g), 12:00 o'clock; Lorin G. Parmelee, whose collection was sold June 25-27, 1890, 306,

realized $46; Dewitt S. Smith; on his death, 1909, purchased by Virgil Michael Brand; on his death, 1926, to Brand estate; 1934, to Armin W. Brand; consigned by Armin W. Brand Feb. 5, 1942, to Burdette G. Johnson, whose St. Louis Stamp & Coin Company, sold it to the ANS, March 1942, for $200, which purchased it using monies from the George Hubbard Clapp Fund; ANS 1942.22.1.

23. Sixpence, 34.5 gr (2.24 g), 11:55 o'clock; Bridgwater House collection; John L. Roper collection; Joseph Lasser collection.

24. Sixpence, 34.7 gr (4.54 g), 1:30 o'clock; displayed at the ANS in exhibit in 1942, then the property of Burdette G. Johnson ("Midwest Coin Firm"); purchased from his St. Louis Stamp & Coin Company, May 1944; ANS 1944.80.1.

25. Threepence, 17.1 gr (1.10 g), 1:00 o'clock; Auctioned by William Eliot Woodward, Apr. 28-May 1, 1863, 1900, realized $8, there sold to Charles I. Bushnell, whose collection was sold by Samuel Hudson and Henry Chapman, June 21-24, 1882, 144, realized $28; Lorin G. Parmelee, whose collection was sold in 1890, where this was lot 309, realized $41; Virgil Michael Brand; 1926, to Brand estate; 1934, to Armin W. Brand; consigned by Armin W. Brand in May 1944, to Burdette G. Johnson, whose St. Louis Stamp & Coin Company, sold it to the ANS for $750; ANS 1944.79.1.

## *Oak Tree Coinage*

26. Shilling, Noe 1, 71.8 gr (4.65 g), 5:45 o'clock; Alan V. Weinberg collection.

27. Shilling, Noe 1, 71.8 gr (4.68 g), 6:00 o'clock; Andrew M. Hain collection.

28. Shilling, Noe 1, 72.2 gr (4.68 g), 5:55 o'clock; Joseph Lasser collection.

29. Shilling, Noe 1, 71.8 gr (4.65 g), 6:00 o'clock; purchased from the Thomas L. Elder sale of Feb. 9, 1912, 692, described as "Fine. Rare," realized $10.75; ANS 1912.37.4

30. Shilling, Noe 1.5, 72.9 gr (4.72 g), 6:00 o'clock; Joseph Lasser collection.

31. Shilling, Noe 3, 69.1 gr (4.48 g), 11:45 o'clock; a lovely specimen showing the edge of the die; Andrew M. Hain collection.

32. Shilling, Noe 3, 72.1 gr (4.67 g), 12:00 o'clock; dies misaligned, so that edge of the die is visible; gift of William B. Osgood Field, July 1946; ANS 1946.89.82.

33. Shilling, Noe 4, 69.8 gr (4.52 g), 11:45 o'clock; a beautiful specimen showing the edge of the die; Alan V. Weinberg collection.

34. Shilling, Noe 4, 71.6 gr (4.64 g), 11:50 o'clock, streaking of letters N and L; Alan V. Weinberg collection.

35. Shilling, Noe 4, 74.6 gr (4.83 g), 1:00 o'clock; Andrew M. Hain collection.

36. Shilling, Noe 5, 69.3 gr (4.49 g), 11:50 o'clock; Anthony Terranova collection.

37. Shilling, Noe 5, 71.6 gr (4.64 g), 11:55 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.86.

38. Shilling, Noe 5, 71.7 gr (4.65 g), 11:57 o'clock; purchased June 1944, from Stack's, apparently privately; ANS 1944.94.4.

39. Shilling, Noe 6, 70.0 gr (4.54 g), 1:00 o'clock; Joseph Lasser collection.

40. Shilling, Noe 6, 71.5 gr (4.63 g), 12:00 o'clock; purchased May 1942, from Carl Würtzbach, using monies from the Edward Groh Fund; ANS 1942.54.8.

41. Shilling, Noe 6.1.1, 71.0 gr (4.60 g), 1:00 o'clock; Andrew M. Hain collection.

42. Shilling, Noe 7, 74.8 gr (4.85 g), 1:00 o'clock; Joseph Lasser collection.

43. Shilling, Noe 9, 72.0 gr (4.67 g), 12 o'clock; Andrew M. Hain collection.

44. Shilling, Noe 9, 71.4 gr (4.63 g), 1:00 o'clock; from Stack's; Andrew M. Hain collection.

45. Shilling, Noe 7, 72.1 gr (4.67 g), 12:00 o'clock; bequest of Arthur J. Fecht, Apr. 3, 1980; ANS 1980.109.2207.

46. Shilling, Noe 9, 71.3 gr (4.62 g), 1:00 o'clock; Joseph Lasser collection.

47. Shilling, Noe 9, 70.5 gr (4.57 g), 12:05 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.87.

48. Shilling, Noe 10, 71.4 gr (4.63 g), 1:30 o'clock; interesting warp; Joseph Lasser collection.

49. Shilling, Noe 10, 70.6 gr (4.57 g), 1:10 o'clock; purchased May 1942, from Carl Würtzbach, using monies from the Edward Groh Fund; ANS 1942.53.1.

50. Shilling, Noe 11, 72.3 gr (4.68 g), 12:00 o'clock; Andrew M. Hain collection.

51. Shilling, halved, Noe 13, 33.6 gr (2.18 g), 12:15 o'clock; from HMS Feversham, Christie's auction Feb. 7, 1989, 1021; Anthony Terranova collection.

52. Shilling, Noe 13, 72.0 gr (4.67 g), 1:00 o'clock; Andrew M. Hain collection.

53. Shilling, Noe 13.3, 70.9 gr (4.59 g), 12:00 o'clock; Andrew M. Hain collection.

54. Shilling, Noe 14, 72.5 gr (4.70 g), 12:30 o'clock; Andrew M. Hain collection.

55. Shilling, Noe 14, 73.0 gr (4.73 g), 1:00 o'clock; purchased April 1973, from the American Philosophical Society Library; ANS 1973.177.22.

56. Shilling, Noe 14, 43.6 gr (2.78 g), 1:00 o'clock, clipped down

to make sixpence; from the wreck of HMS Feversham; Christie's auction Feb. 7, 1989, 1019; gift of Joseph Lasser, 1990; ANS 1990.49.6.

57. Sixpence, Noe 16, 33.9 gr (2.20 g), 1:00 o'clock; Andrew M. Hain collection.

58. Sixpence, Noe 16, 34.6 gr (2.24 g), 11:00 o'clock; Joseph Lasser collection.

59. Sixpence, Noe 16, 34.6 gr (2.24 g), 12:55 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.75.

60. Sixpence, Noe 20, 33.7 gr (2.18 g), 12:00 o'clock; Andrew M. Hain collection.

61. Sixpence, Noe 21, 35.2 gr (2.28 g), 12:00 o'clock; Andrew M. Hain collection.

62. Sixpence, Noe 21, 12:50 o'clock; rippled; Anthony Terranova collection.

63. Sixpence, Noe 21, 34.1 gr (2.21 g), 12:00 o'clock; overstruck on a shilling; Joseph Lasser collection.

64. Sixpence, Noe 21, 34.57 gr (2.24 g) 12:05 o'clock; purchased Oct. 1943 from C. P. Knoth; ANS 1943.111.3.

65. Sixpence, Noe 22, 32 gr (2.07 g), 12:00 o'clock; Joseph Lasser collection.

66. Threepence, Noe 23, 17 gr (1.10 g), 12:00 o'clock; S. Chapman, H. P. Smith sale, May 1906; Norweb 1179; Joseph Lasser collection.

67. Threepence, Noe 24, 17.3 gr (1.12 g), 12:00 o'clock; Andrew M. Hain collection.

68. Threepence, Noe 24, 18.5 gr (1.20 g), 11:50 o'clock; Alan V. Weinberg collection.

69. Threepence, Noe 27.1, 16.0 gr (1.04 g), 12:00 o'clock; Andrew M. Hain collection.

70. Threepence, Noe 27.1, 16.2 gr (1.05 g), 12:15 o'clock; Alan V. Weinberg collection.

71. Threepence, Noe 28.5, 15.2 gr (0.98 g), 12:00 o'clock; Andrew M. Hain collection.

72. Twopence, Noe 29, 10.9 gr (0.71 g), 11:55 o'clock; Andrew M. Hain collection.

73. Twopence, Noe 29, 11.16 gr (0.72 g), 11:55 o'clock; Alan V. Weinberg collection.

74. Twopence, Noe 32, 12.8 gr (0.83 g), 11:55 o'clock; Andrew M. Hain collection.

75. Twopence, Noe 32, 11.8 gr (0.76 g), 12:00 o'clock; Joseph Lasser collection.

76. Twopence, Noe 33, 12.7 gr (0.82 g), 11:50 o'clock; Alan V. Weinberg collection.

77. Twopence, Noe 34, 10.0 gr (0.65 g), 12:00 o'clock; Andrew M. Hain collection.

78. Twopence, Noe 34, 10.4 gr (0.67 g), 11:50 o'clock; Alan V. Weinberg collection.

## *Pine Tree Coinage*

79. Shilling, Noe 1, 72.1 gr (4.67 g), 11:45 o'clock; Chapman Earle sale lot 1948 (plate); Andrew M. Hain collection.

80. Shilling, Noe 1, 72.2 gr (4.68 g), 11:45 o'clock; Anthony Terranova collection.

81. Shilling, Noe 1, 69.4 gr (4.50 g), 11:45 o'clock; Norman Stack collection.

82. Shilling, Noe 1, 71.3 gr (4.62 g), 11:00 o'clock; purchased June 1944, from Stack's, apparently privately; ANS 1944.94.2.

83. Shilling, Noe 1, 72.7 gr (4.71 g), 11:00 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.48.

84. Shilling, Noe 2, 67.7 gr (4.39 g), 12:00 o'clock; Andrew M. Hain collection.

85. Shilling, Noe 2, 69.2 gr (4.48 g) 12:00 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.53.

86. Shilling, Noe 3, 72.7 gr (4.71 g), 12:00 o'clock; Andrew M. Hain collection.

87. Shilling, Noe 4, 72.2 gr (4.68 g), 11:30 o'clock; Andrew M. Hain collection.

88. Shilling, Noe 4, 71.5 gr (4.63 g), 11:55 o'clock, mashed letters AND; Alan V. Weinberg collection.

89. Shilling, Noe 4, 71.5 gr (4.63 g), 11:55 o'clock; nice gentle warp, tree side convex; Joseph Lasser collection.

90. Shilling, Noe 4, 68.1 gr (4.41 g) 11:30 o'clock; purchased Oct. 1970, from Richard Picker, using monies from the funds established by Edward Groh, George Hubbard Clapp and Arthur J. Fecht; ANS 1970.19.1.

91. Shilling, Noe 4.5, 68.5 gr (4.44 g), 12:00 o'clock; Andrew M. Hain collection.

92. Shilling, Noe 5, 67.9 gr (4.40 g), 12:00 o'clock; Andrew M. Hain collection.

93. Shilling, Noe 5, 71.9 gr (4.66 g), 11:55 o'clock; die break in M of DOM; streaking HVS; Alan V. Weinberg collection.

94. Shilling, Noe 6, 73.8 gr (4.78 g), 11:30 o'clock; Andrew M. Hain collection.

95. Shilling, Noe 6, 71.1 gr (4.61 g), 11:55 o'clock, die break in M of DOM, streaking HVS; Alan V. Weinberg collection.

96. Shilling, Noe 7, 72.4 gr (4.69 g), 12:30 o'clock; Andrew M. Hain collection.

97. Shilling, Noe 7, 70.6 gr (4.57 g), 12:00 o'clock; strange warp at 10:30; Joseph Lasser collection.

98. Shilling, Noe 8, 71.7 gr (4.65 g), 12:00 o'clock; Andrew M. Hain collection.

99. Shilling, Noe 8, 68.1 gr (4.41 g), 11:55 o'clock; Andrew M. Hain collection.

100. Shilling, Noe 8, 71.1 gr (4.61 g), 12:00 o'clock; Joseph Lasser collection.

101. Shilling, Noe 8, 70.6 gr (4.57 g), 11:45 o'clock; purchased Nov. 1943, from Carl Würtzbach; ANS 1943.133.2.

102. Shilling, Noe 10, 67.5 gr (4.37 g), 12:00 o'clock; streaking of letters HVS; Joseph Lasser collection.

103. Shilling, Noe 10, 71.2 gr (4.61 g), 12:00 o'clock, HVS streaked; Anthony Terranova collection.

104. Shilling, Noe 10: "witch piece," 72.3 gr (4.69 g), 11:00 o'clock; D. C. Wismer estate; New Netherlands Coin Company sale Oct. 5, 1951, 19, realized $27.50, purchased by the ANS using monies from the George Hubbard Clapp Fund; ANS 1951.155.3.

105. Shilling, Noe 11, 72.0 gr (4.67 g), 11:00 o'clock; Andrew M. Hain collection.

106. Shilling, Noe 12, unique, 62.0 gr (4.01 g), 12:00 o'clock; Castine hoard; William Eliot Woodward Sale, Oct. 1863, 2467, ("for an account of this unique piece from the lot discovered at Castine, see Historical Magazine for the present month") realized $6, sold to Murray; Eric P. Newman collection.

107. Shilling, Noe 13, 47.6 gr (3.08 g), 12:00 o'clock; Massachusetts Historical Society; Joseph Lasser collection; contemporary counterfeit. This coin was earlier used for the photograph in Noe's monograph.

108. Shilling, Noe 15, 75.5 gr (4.89 g), 12:00 o'clock; Andrew M. Hain collection.

109. Shilling, Noe 15, 71.8 gr (4.65 g), 12:00 o'clock; Joseph Lasser collection.

110. Shilling, Noe 16, 72.7 gr (4.71 g), 1:00 o'clock; Andrew M. Hain collection.

111. Shilling, Noe 16, 72.2 gr (4.68 g), 1:00 o'clock; Alan V. Weinberg collection.

112. Shilling, Noe 17, 71.8 gr (4.65 g), 1:00 o'clock; Anthony Terranova collection.

113. Shilling, Noe 18, 73.1 gr (4.74 g), 12:30 o'clock; Andrew M. Hain collection.

114. Shilling, Noe 19, 69.1 gr (4.48 g), 12:00 o'clock; Andrew M. Hain collection.

115. Shilling, Noe 19, 69.9 gr (4.53 g), 12:00 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.67.

116. Shilling, Noe 20, 69.3 gr (4.49 g), 1:00 o'clock; purchased May 1942, from Carl Würtzbach; ANS 1942.54.3.

117. Shilling, Noe 22, 69.1 gr (4.48 g), 12:00 o'clock; Andrew M. Hain collection.

118. Shilling, Noe 22, 70.4 gr (4.56 g), 12:00 o'clock; Harlan P. Smith collection, 1900, 14, realized $18, thence to Colonel James Ellsworth, 1923; to Knoedler syndicate; John Work Garrett, on his death 1942, to Alice Warder Garrett; on her death 1952, to Johns Hopkins University; privately to Richard Picker; sold in the sale of his collection, Oct. 24, 1984, 32; Joseph Lasser collection.

119. Shilling, Noe 24, 70.0 gr (4.54 g), 1:00 o'clock; Andrew M. Hain collection.

120. Shilling, Noe 26, 67.6 gr (4.38 g), 12:00 o'clock; double struck, very oval; Norman Stack collection.

121. Shilling, Noe 26, 70.7 gr (4.58 g), 1:00 o'clock; Joseph Lasser collection.

122. Shilling, Noe 26, double struck, 66.7 gr (4.32 g), 12:30 o'clock; gift of Charles Wormser, Sept. 1951; ANS 1951.136.2.

123. Shilling, Noe 26.2, 67.3 gr (4.36 g), 12:00 o'clock; Andrew M. Hain collection.

124. Shilling, Noe 27, 67.8 gr (4.39 g), 1:00 o'clock; Andrew M. Hain collection.

125. Shilling, Noe 27, 74.1 gr (4.80 g), 12:30 o'clock; Bowers and Merena Sept. 15, 1990, 1698; Joseph Lasser collection.

126. Shilling, Noe 28, 71.2 gr (4.61 g), 12:00 o'clock; Andrew M. Hain collection.

127. Shilling, Noe 28, misstruck, 67.0 gr (4.34 g), 12:10 o'clock; Walter Breen; Warfield consignment to mail bid sale held by Alfred Hutter of Baltimore, Nov. 8, 1952, 1370, estimate $75, price realized $49; purchased by the ANS, using monies from the George Hubbard Clapp fund; ANS 1952.180.1.

128. Shilling, Noe 29, 71.8 gr (4.65 g), 12:10 o'clock; gift of William Allen, May 1942; ANS 1942.57.27.

129. Shilling, Noe 30, 70.5 gr (4.57 g), 12:00 o'clock; Andrew M. Hain collection.

130. Sixpence, Noe 33, 31.5 gr (2.04 g), 11:30 o'clock; Andrew M. Hain collection.

131. Sixpence, Noe 33, 33.7 gr (2.18 g), 11:00 o'clock; Alan V. Weinberg collection.

132. Sixpence, Noe 33A, 34.8 gr (2.25 g), 11:30 o'clock; Andrew M. Hain collection.

133. Threepence, Noe 34, 18.4 gr (1.19 g), 11:45 o'clock, very oval; Andrew M. Hain collection.

134. Threepence, Noe 34, 17.4 gr (1.13 g), 11:30 o'clock; Joseph Lasser collection.

135. Threepence, Noe 35, 16.2 gr (1.05 g), 11:30 o'clock; Andrew M. Hain collection.

136. Threepence, Noe 36, 16.7 gr (1.08 g), 11:45 o'clock; Joseph

Lasser collection.

137. Threepence, Noe 36, 16.8 gr (1.09 g), 11:30 o'clock; Andrew M. Hain collection.

138. Threepence, Noe 36, 19.0 gr (1.23 g), 11:00 o'clock; Massachusetts side convex, New England concave; Alan V. Weinberg collection.

139. Threepence, Noe 36 16.9 gr (1.10 g), 10:30 o'clock; gift of William B. Osgood Field, July 1946; ANS 1946.89.45.

140. Pine Tree Shilling, forgery, Newman PQ, unique; 97.7 gr (6.33 g), 1:00 o'clock; Eric P. Newman collection.
This forgery was based upon the drawing in the catalogue of the Earl of Pembroke's collection, published in 1746. See Eric P. Newman, *The Secret of the Good Samaritan Shilling*, pp. 51-53.

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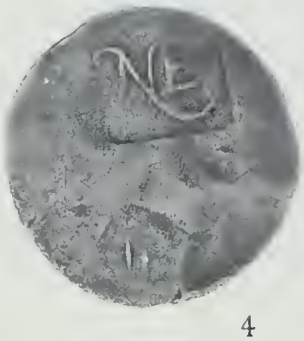


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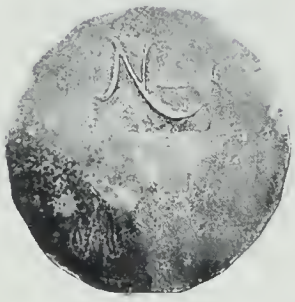

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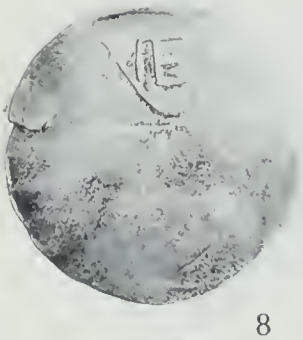

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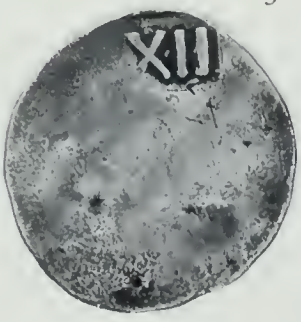

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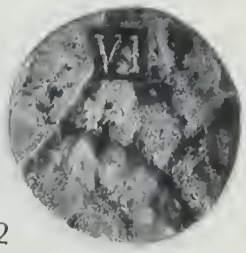

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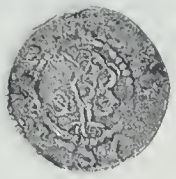

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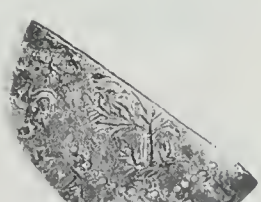

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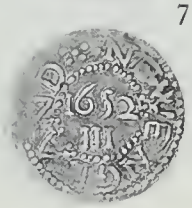

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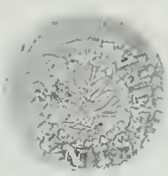
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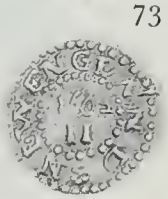

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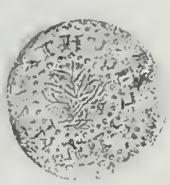
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# Appendix 2: American Indian Peace Medals of the Colonial Period In the Collection of the American Numismatic Society

*Alan M. Stahl and William Scully*

**Coinage of the Americas Conference at the American Numismatic Society, New York**

**May 4, 1991**

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This is a catalogue of medals in the ANS Collection which are believed to have been manufactured and distributed to American Indians up to the end of the eighteenth century. Pieces which are aftercasts and restrikes are generally omitted unless there is evidence that they were copied and distributed during the period in question. Much of the research on the provenance and die states and identities of these pieces was carried out by Scully as his 1991 Field Work Term project for Bennington College; the final catalogue was prepared by Stahl.[1]

## Medals in the Name of French Kings

*Louis XIV, 1643-1715*

1. Felicitas Domus Augustae

Obv.: Bust of Louis XIV, r.; LUDOVICUS MAGNUS REX CHRISTIANISSIMUS.

Rev.: Busts of Louis the Dauphin, Louis, Duke of Burgundy, Philippe, Duke of Anjou and Charles, Duke of Berry; FELICITAS DOMUS AUGUSTAE.; MDCXCIII
Signed on obv. and rev. by H. Roussel.

Zay 295; Betts 75; Morin 14-15; Jacquiot 624-29; *Cat. gen.*.1.211.
Struck silver, 75.4 mm, 5.3 mm thick at rim, 199.97 gr with unattached decorative silver loop.
1908.277.1; gift of Daniel Parish, Jr., 1908.

*Louis XV, 1715-74*

2. Honos et Virtus

Obv.: Bust of Louis XV, r.; LUDOVICUS XV. REX CHRISTIANISSIMUS

Rev.: Two classical figures, with spears, shaking hands; HONOS ET VIRTUS
Signed on obv. by J. Du Vivier.

Betts 160; McLachlan 6-7; Morin 19-21; *Cat. gen.* 1.268.
Struck silver, 55.9 mm, 4.0 mm thick at rim, 91.38 gr, loop removed; ex Hunter 38, Phillips 838.
1925.109.1, purchased 1925 with funds from John W. Garrett.

3. Honos et Virtus

As 2. GORGE III reengraved over LUDOVICUS XV
Struck silver, 55.7 mm, 4.2 mm thick at rim, 90.22 gr, loop removed; ex Hunter 39, Phillips 839.
1925.108.1, purchased 1925 with funds from W. B. Osgood Field.

4. Honos et Virtus
   As 2. GEORGIUS III REX DEI GRATIA reengraved over obv. legend; 1775 engraved in rev. exergue
   Struck silver, 56.1 mm, 3.5 mm thick at rim, 73.04 gr, loop attached.
   1926.28.1, gift of S. H. P. Pell and E. T. Newell, 1926.

## Medals in the Name of English Monarchs

*Anne, 1702-14*

5. Marlborough's Victories
   Obv.: Bust of Anne, l.; ANNA D:G:MAG:BR.FRA:ET. HIB.REGINA
   Rev.: Female kneeling r. before horseman; SINE.CLADE.VICTOR CAPTIS.BONNA.HVO.LIMBVRGO.1703
   Hawkins 2, 246, 35; Hayden 222-24.
   Struck silver, 42.0 mm, 3.0 mm thick at rim, 35.91 gr, holed.
   0000.999.32799, no information on provenance.

*George I, 1714-27*

6. Indian and Deer
   Obv.: Bust of George I, r.; GEORGE:KING:OF:GREAT: BRITAIN
   Rev.: Bearded figure to r., bow on ground, deer to r. of tree
   Betts 164; Jamieson 4; Quarcoopome 6 (with mistaken provenance).
   Struck (?) bronze, 38.1 mm, 1.4 mm thick at rim, 11.45 gr; ex Hunter 41.
   1920.213.1, gift of Robert J. Eidlitz, 1920.

7. Indian and Deer
   Obv.: Bust of George I, r.; GEORGE.KING.OF.GREAT. BRITAIN
   Rev.: Figure to r. shooting bow at deer to l. of tree.
   Betts 161; Quarcoopome 8.
   Struck bronze, loop apparently removed, 40.5 mm, 1.4 mm thick at rim, 14.81 gr. Obv. flan cracks through first O, between N and G.
   1940.80.1, gift of Miss M. M. Greenwood, 1940.

8. Indian and Deer
   As 7.
   Betts 161; Quarcoopome 9.
   Struck (?) bronze, 39.9 mm, 1.4 mm thick at rim, 15.83 gr, bronze loop attached, heavily corroded; ex Hunter 43.
   1920.212.1, gift of Bauman L. Belden, 1920.

9. Indian and Deer
   Obv.: Bust of George I, r.; GEORGE:KING:OF GREAT: BRITAIN; initials TC in truncation of bust
   Rev.: As 7.
   Betts 162; Jamieson 2; Quarcoopome 12.
   Struck bronze, 39.8 mm, 1.4 mm thick at rim, 14.76 gr, sections of rim broken off; ex Hunter 44.
   1966.16.6, gift of the Norweb Collection, 1966.

10. Indian and Deer
    As 9.
    Betts 162; Quarcoopome 17.
    Struck bronze, 40.9 mm, 1.7 mm thick at rim, 20.02 gr, loop removed; ex J. Coolidge Hills.
    1967.225.329, bequest of J. Coolidge Hills.

11. Indian and Deer
    As 9.
    Betts 163; Jamieson 1; Quarcoopome 23.
    Struck bronze, 40.9 mm, 1.9 mm thick at rim, 21.34 gr.
    1921.132.1, purchased 1921.

*George II, 1727-60*

12. Heraldic
    Obv.: Bust of George II, l.; GEORGIVS.II.D:G:MAG:BRI: FRA:ET.H:REX.F.D.
    Rev.: Arms of Great Britain within garter, lion and unicorn supporters, helmet above
    Hawkins 2, 498, 42; Betts 396; Murphy 50-51; Morin 26-28; Gillingham 104-5; Jamieson 6.
    Cast silver, 46.6 mm, 1.9 mm thick at rim, 26.99 gr, loop removed, holed; found in Hamilton Cove, Labrador, 1900.
    1917.137.3, gift of J. Sanford Saltus, 1917.

13. Quaker medal
    Obv.: Bust of George II, l.; GEORGIVS.II. DEI.GRATIA
    Rev.: Indian seated to l. of fire, Quaker with pipe to r.; LET US LOOK TO THE MOST HIGH WHO BLESSED OUR FATHERS WITH PEACE J757.
    Hawkins 2, 682-83, 399; Hayden 233-24; Betts 401; Morin 28-29; Gillingham 103-22; Jamieson 8; Julian 69.
    Struck silver, 44.0 mm, 1.9 mm thick at rim, 26.43 gr; overstruck on Mexican 8 reales, holed.
    1966.16.8 gift of the Norweb Collection, 1966.

14. Quaker medal
    As 13.
    Struck silver, 43.3 mm, 1.8 mm thick at rim, 26.10 gr; overstruck on Mexican 8 reales, holed.
    0000.999.32867, no information on provenance.

15. Quaker medal
    As 13.
    Struck silver, 44.0 mm, 1.7 mm thick at rim, 25.98 gr; overstruck on Mexican 8 reales, holed; scratches on reverse.
    0000.999.32877, no information on provenance.

16. Quaker medal
    As 13.
    Struck pewter 43.2 mm, 2.9 mm thick at rim, 25.08 gr, small hole.
    1917.999.612, gift of J. Sanford Saltus, 1917.

*George III, 1760-1820*

17. Heraldic
    Obv.: Bust of George III, r.; GEORGIUS III DEI GRATIA.
    Rev.: Crowned arms of Great Britain (pre-1801) with lion and unicorn supporters
    Betts 435; Morin 36-37; Jamieson 14.
    Struck silver, 79.3 mm, 2.4 mm thick at rim, 92.43 gr, holed and looped; ex Walter C. Wyman, said to have been given to Chief Little Knife of the Ottowa Macinacs.
    1923.52.7, gift of the Committee on Indian Peace Medals, 1923.

18. Heraldic
    As 17.
    Betts 435; Morin 36-37; Jamieson 13.
    Two struck silver shells joined by silver ring, 77.1 mm, 3.9 mm thick at rim, 48.83 gr, holed and looped, vertical crack or die break on obv.; ex Walter C. Wyman.
    1923.52.8, gift of the Committee on Indian Peace Medals, 1923.

19. Heraldic
    As 17.
    Struck silver, 77.2 mm, 2.4 mm thick at rim, 91.25 gr.; two holes at top of O, small drilling between I and G; scratched, pitted and worn, obv. and rev.; ex Mrs. William H. Robinson, who reported that her grandfather, Samuel Gwathmey, had been given it by William Henry Harrison, who had taken it from the neck of Tecumseh.
    1919.154.1, gift of Mrs. John Reilly, acquired from Henry Chapman who had purchased it from Orin Tyler, nephew of Mrs. Robinson.

20. Heraldic
As 17.
Betts 439; Morin 36-37; Jamieson 15.
Struck silver, 60.6 mm, 2.5 mm thick at rim, 57.00 gr, holed and looped; diagonal die break through rev. shield; ex. Wilson 935.
1925.173.3, gift of R. H. Lawrence and DeWitt C. Falls.

21. Heraldic
Obv.: As 17
Rev.: Crowned arms of Great Britain (post-1801) with lion and unicorn supporters
Betts 439; Morin 39-40; Jamieson 22.
Struck silver, 61.4 mm, 1.6 mm thick at rim, 48.77 gr, holed and looped.
0000.999.32881, no information on provenance.

22. Hungry Wolf
Obv.: As 17
Rev.: Lion seated on hill, menaced by wolf, church and buildings in background
Betts 535; Morin 32-34; Jamieson 11.
Two struck silver shells in silver ring, 58.7 mm, 3.7 mm thick at rim, 39.38 gr, holed and looped, scratch on rev. in upper field.
1926.168.1, gift of A. Firestone, 1926.

23. Hungry Wolf
As 22.
Silver, 61.3 mm, 3.6 mm, 64.61 gr, holed and looped; vertical die break on rev. through back of lion.
0000.999.32901, provenance uncertain: this or no. 24 is 1918 purchase of medal said to have been presented to the Great Grandfather of Dark Cloud of the Abenaki tribe, St. Francis Reservation.

24. Hungry Wolf
As 22.
Silver, 61.1 mm, 2.3 mm thick at rim, 39.91 gr, holed and dented; vertical die break on rev. through back of lion.
0000.999.32900, provenance uncertain, see no. 23.

25. Hungry Wolf
As 22.
Pewter, 61.9 mm, 3.8 mm thick at rim, 52.06 gr, holed and double looped; two vertical die breaks on rev. through back of lion and of wolf; ex Wilson 931.
1925.173.6, gift of Waldo Newcomer, 1925.

26. Happy While United
Obv.: Bust of George III, r.; GEORGIUS III.D.G.M.BRI.

FRA.ET.HIB.REX.F.D.
Rev.: Indian and Quaker on bench under tree; HAPPY WHILE UNITED
Betts 513; Fuld, Tayman HWU1.
Cast silver, 56.2 mm diameter, 69.9 mm top-to-bottom, 2.3 mm thick at rim, 50.26 gr, loop in the form of a pipe and wing.
1941.69.1, purchased from Thomas A. Hendricks, 1941.

27. Happy While United
Obv.: As 26
Rev.: As 26, except HAPPY WHILE UNITED 1764
Hallmarked N:YORK and DCF
Betts 513; Jamieson 12; Fuld, Tayman HWU6.
Cast silver, 55.3 mm diameter, 2.2 mm thick at rim, 52.88 gr, loop broken off; ex W. C. Wyman.
1923.52.6, gift of the Committee on Indian Peace Medals, 1923.

28. Happy While United
Obv.: As 26
Rev.: As 26 except HAPPY WHILE UNITED 1766
Betts 513; Fuld, Tayman HWU12.
Two cast silver shells joined by a silver ring, 59.6 mm, 72.2 mm top-to-bottom, 5.5 mm thick at rim, 67.70 gr, loop in the form of a pipe and a wing; ex. Wilson 929, purchased by Wilson in 1913 from the grandson of Ezekial Jewett, a post trader at Fort Niagara, NY, who found it near the fort in 1840.
1925.173.1, gift of William H. Perkins, R. W. DeForest and James B. Ford, 1925.

## Medals of the United States of America, Pre-1800

29. Confederation pattern
Obv.: Indian and female figure before fire
Rev.: Heraldic eagle within links of chain
Julian, *ANSMN* 257; Julian 70.
Struck bronze, 73.8 mm, 3.9 mm thick at rim, 133.28 gr.
1947.134.55, gift of Wayte Raymond, 1947.

30. Oval Washington, 1789
Obv.: Indian and armed female; G. WASHINGTON PRESIDENT. 1789
Rev.: Heraldic eagle; THE UNITED STATES OF AMERICA
Belden 4C; Prucha 22.
Engraved silver 106.2x134.4 (139.0 including loop) mm, 2.9 mm thick at rim, 66.10 gr, single sheet within silver ring joined at top; attach-

ed loop with open pointed ends; said to have been found by a Union soldier in the South during the Civil War; sold in the John F. Noegel sale, 1915, to Mrs. L. A. Bland.
1916.999.197, purchased 1916.

31. Oval Washington, 1792
Obv.: Indian and George Washington; GEORGE WASHINGTON PRESIDENT 1792
Rev.: Heraldic eagle
Belden 4C; Prucha 34.
Engraved silver, 81.4x124 (132.9 including loop) mm, 2.9 mm thick at rim, 115.36 gr, single sheet within silver ring joined at top, loop attached.
1921.23.1, gift of Howland Wood and Elliot Smith, 1921.

32. Oval Washington, 1793
Obv.: Indian and George Washington; GEORGE WASHINGTON PRESIDENT 1793
Rev.: Heraldic eagle
Belden 5A.
Engraved silver 127.5x173 (184 including loop) mm, 4.1 mm thick at rim, 167.85 gr, single sheet within silver ring joined at top, loop attached.
1915.138.4, gift of Stephen H. P. Pell, 1915.

33. Oval Washington, 1793
As 32.
Hallmarked: JL on obv.
Belden 7C.
Engraved silver 81.2x122.3, 0.9 mm thick, 58.73 gr, single sheet, ring removed, holed, very worn, cracked and hammered; ex Wilson 952.
1925.173.11, gift of Edward D. Adams, Robert J. Eidlitz and Susan D. Griffith, 1925.

34. Farming Seasons Medal
Obv.: Cow licking calf, man tending sheep
Rev.: SECOND PRESIDENCY OF GEO: WASHINGTON MDCCXCVI.
Belden 12, Prucha 37; designed by J. Trumbull, dies engraved by C. H. Küchler, struck by Boulton and Watt, Birmingham.
Struck silver, 48.2 mm, 3.8 mm thick at rim, 47.50 gr, pitted and worn, some tooling, obv. legend lacking, possibly effaced; loop attached front-to-back.
0000.999.32962, no information on provenance.

35. Farming Seasons Medal
Obv.: As 34 except U.S.A.
Rev.: As 34.

Struck copper, 48.3 mm, 3.4 mm thick at rim, 47.22 gr, loop attached front-to-back.
0000.999.32963, no information on provenance.

36. Farming Seasons Medal
As 35.
Struck silver proof, 48.3 mm, 3.0 mm thick at rim, 47.13 gr, in custom box with 40 and 43.
1915.141.1, gift of Henry Walters, 1915.

37. Sowing Seasons Medal
Obv.: Man sowing wheat; U.S.A.
Rev.: As 35.
Belden 13; Prucha 37; designed by J. Trumbull, dies engraved by C. H. Küchler, struck by Boulton and Watt, Birmingham.
Struck silver, 48.3 mm, 3.2 mm thick at rim, 46.77 gr, looped front-to-back; ex Wilson 953.
1925.173.12, gift of Hoyt Miller, 1925.

38. Sowing Seasons Medal
As 37.
Struck copper, 48.3 mm, 3.5 mm thick at rim, 48.01 gr, looped back-to-front; ex Wilson 954.
1925.173.13, gift of William R. Britton and Moritz Wormser, 1925.

39. Sowing Seasons Medal
As 37.
Struck copper, 48.4 mm, 3.5 mm thick at rim, 47.67 gr, hammered on faces and rim.
0000.999.32964, no information on provenance.

40. Sowing Seasons Medal
As 37.
Struck silver proof, 48.3 mm, 2.9 mm thick at rim, 46.12 gr, in custom box with 36 and 43.
1915.140.1, gift of James W. Ellsworth, 1915.

41. Spinning Seasons Medal
Obv.: Woman in room spinning, child tending baby, loom in background; U.S.A.
Rev.: As 34.
Belden 14; Prucha 37; designed by J. Trumbull, dies engraved by C. H. Küchler, struck by Boulton and Watt, Birmingham.
Struck silver, 48.3 mm, 2.9 mm thick at rim, 46.10 gr, loop removed.
1915.122.1 purchased 1915, with funds from the Edward Groh Memorial Fund.

42. Spinning Seasons Medal
As 41.

Struck copper, 48.2 mm, 3.4 mm thick at rim, 46.64 gr, loop removed.
0000.999.32966, no information on provenance.

43. Spinning Seasons Medal
As 41.
Struck silver proof, 48.3 mm, 2.9 mm thick at rim, 46.65 gr, in custom box with 36 and 40.
1915.139.1, gift of J. P. Morgan.

## Medals Previously Classed as Indian Peace Medals for Which Evidence of Such Use is Lacking or Inconclusive

44. Indian and Deer
Obv.: Bust of George II, l.; GEORGIVS.II.D.G.MAG.BR. FR.ET.HIB.REX.
Rev.: Figure facing l., shooting bow at deer running l.
Hawkins II.485.23; Jamieson 5.
Struck bronze 24.8 mm, 1.8 mm thick at rim, 5.63 gr.
1941.175.1, gift of Mr. and Mrs. Frank H. Brooks, 1941.

45. Indian and Deer
As 13.
Struck bronze, 24.2 mm, 0.8 mm thick at rim, 3.26 gr, traces of gilding on obv. and rev.
0000.999.32958, no information on provenance.

46. Indian and Deer
As 13.
Struck bronze, 24.7 mm, 1.2 mm thick at rim, 3.80 gr, pieces missing from rim.
0000.999.32866, no information on provenance.

47. George III and Charlotte
Obv.: Facing busts of George III and Queen Charlotte
Rev.: Crowned arms of Great Britain with lion and unicorn supporters
Betts 440; Morin 31-32, cf. Brown 40 and 52.
Struck silver, 38.1 mm, 1.5 mm thick at edge, 17.04 gr, holed and filled, with unattached decorative silver loop; ex Wilson 928.
1925.173.5, gift of Albert Gallatin and Frank D. Andrews, 1925.

48. George III
Obv.: Bust of George III, r.; GEORGIVS III DEI GRATIA 1794
Rev.: Arms of Great Britain with lion and unicorn supporters
Edge: MAY HE EVER REIGN IN THE HEARTS OF HIS PEOPLE
Signature of "Miller" under truncation on obv.

Morin 39; Jamieson, 19; Brown 371, as token of a London club.
Struck silver, 32.2 mm, 1.7 mm thick at edge, 12.97 gr, loop attached; ex Wilson 936.
1925.173.4, gift of Mortimer Schiff and William Church Osborne, 1925.

49. George III
As 48.
Struck silver, 31.8 mm, 1.8 mm thick at edge, 12.37 gr.
1966.16.9, gift of the Norweb Collection, 1966.

[1] References in the catalogue are abbreviated as follows:

| | |
|---|---|
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| Fuld, Tayman | George J. Fuld and Barry D. Tayman, "The Montreal and Happy While United Indian Peace Medals," in Alan M. Stahl, ed., *The Medal in America*, COAC Proceedings 4 (New York, 1988), pp. 19-44. |
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| Murphy | P. B. Murphy, "Correspondence," *The Numismatist* 1908, pp. 50-51. |
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| | |
|---|---|
| Prucha | Francis Paul Prucha, *Indian Peace Medals in American History* (Madison, 1971). |
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| Wilson | Wayte Raymond, Nov. 16, 1925 (W. W. C. Wilson). |
| Zay | E. Zay, "Médailles d'honneur pour les indiens," *Annuaire de la Société Française de Numismatique* 13 (1889), pp. 294-301. |

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GEORGE III REX CHRISTIANISSIMUS

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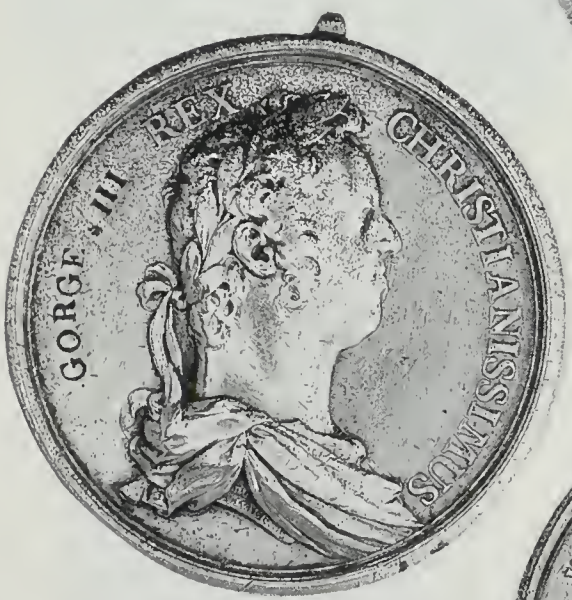
GEORGE III REX CHRISTIANISSIMUS

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HONOS ET VIRTUS

4

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GEORGE KING OF GREAT BRITAIN

10

GEORGE KING OF GREAT BRITAIN

11

GEORGIVS II D G M A BRI FRA ET HIB REX

12

GEORGIVS · II · DEI · GRATIA

LET US LOOK TO THE MOST HIGH WHO BLESSED OUR FATHERS WITH PEACE
1757

13

1757

14

1757

15

GEORGIVS · II · DEI · GRATIA

LET US LOOK TO THE MOST HIGH WHO BLESSED OUR FATHERS WITH PEACE
1757

16

GEORGIUS III
DEI GRATIA

17

HONI SOIT QUI MAL Y PENSE
DIEU ET MON DROIT

GEORGIUS III DEI GRATIA

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HONI SOIT QUI MAL Y PENSE
DIEU ET MON DROIT

GEORGIUS III° DEI GRATIA

19

SOIT QUI MAL Y PENSE
HONI
DIEU ET MON DROIT

GEORGIUS III DEI GRATIA

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HONI SOIT QUI MAL Y PENSE
DIEU ET MON DROIT

GEORGIUS III DEI GRATIA

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HONI SOIT QUI MAL Y PENSE
DIEU ET MON DROIT

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GEORGIUS III D: G: BRITANNIAR: REX F: D:

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THE UNITED STATES OF AMERICA.
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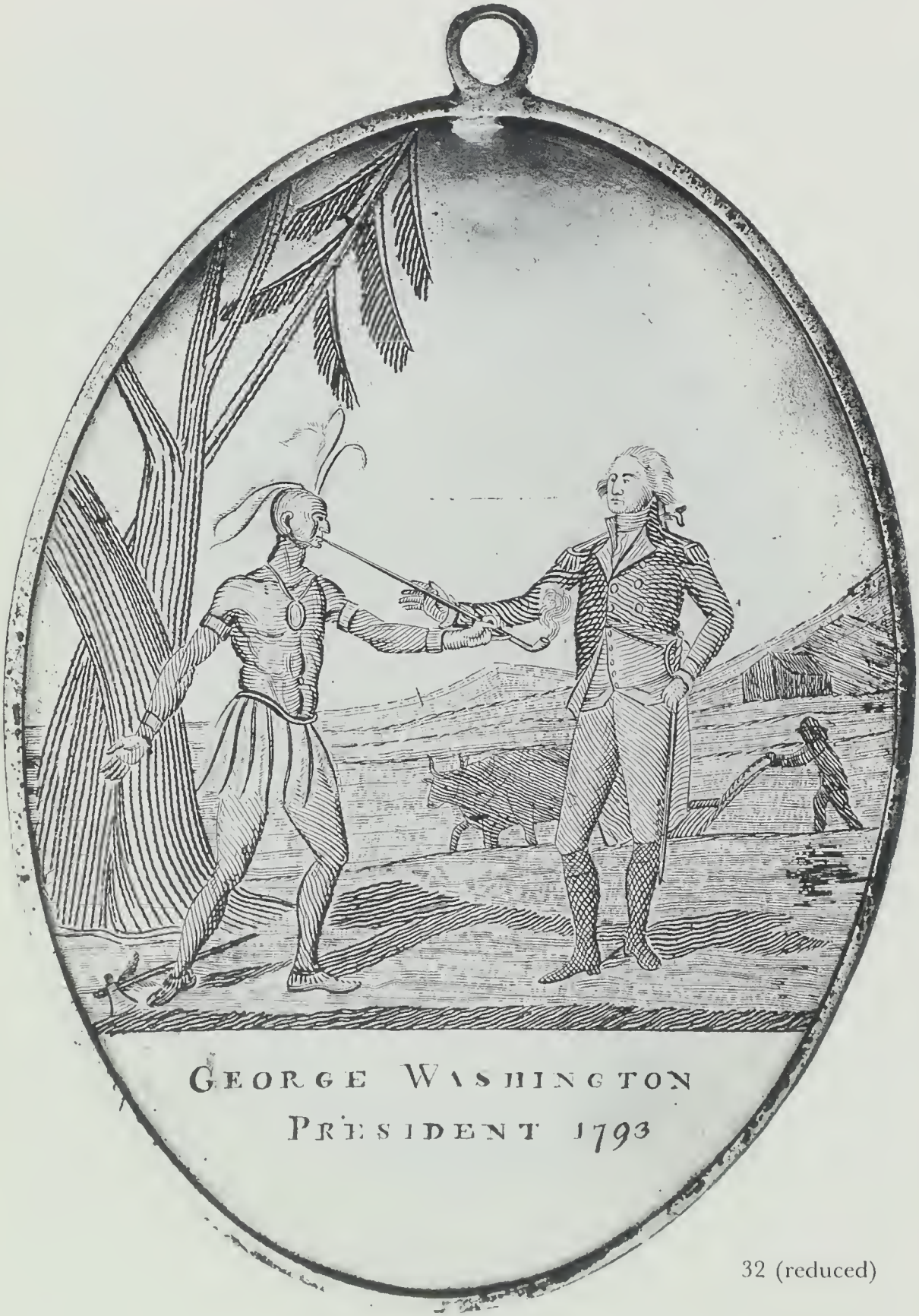


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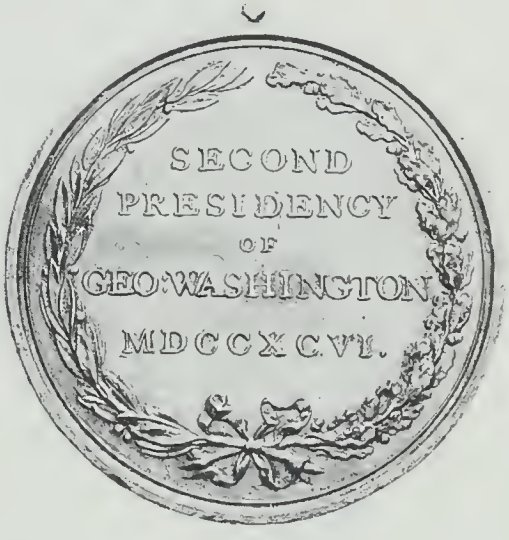
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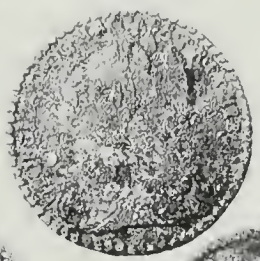

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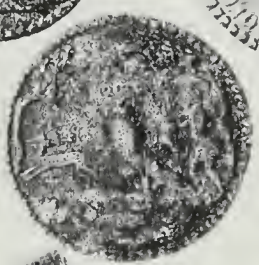

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August 8, 1992

Mr. Eric P. Newman
6450 Cecil Avenue
St. Louis, MO 63105

Dear Eric,

I am pleased to enclose a copy of the 1991 COAC Proceedings volume together with 50 offprints of your article appearing therein in appreciation of your participation in the conference. The book is now being distributed to over 600 subscribers and I anticipate a most favorable response to this latest addition to the literature on early American coinage and currency.

Thanks again for your cooperation.

Sincerely yours,

Leslie A. Elam
Director